Engaging young minds. Addressing school travel challenges through innovation.

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Abstract
School trips are particularly suitable to utilising alternatives to the car. However, on an average school day more than one in five cars on the road during peak hour in Perth are involved in ferrying children to school. In WA the Department of Transport has been piloting a new approach to turn this around.

Programs targeting school travel can be effective at directly reducing the number of car trips to school and can lay the foundation for less car intensive lifestyles in the future. Often approaches have focused on in-class lessons or the creation of a travel plan without much consideration of how the school community will be engaged or how that engagement will be sustained.

In 2010 the Department piloted a new approach, partnering with 10 primary schools and 6 local government partners. The new model takes a holistic and school-centric approach to school travel. It incorporates a suite of travel based activities that are designed to engage and empower the school community to embrace active transport options for school travel.

Fundamental design elements include:
- A whole school approach
- Building a working group or 'Travelsmart team' consisting of students, parents and teachers to implement the program within the school
- Partnering with local government to provide hands on day to day facilitation of the program
- Integrating classroom activities to the broader program
- Maintaining motivation, engagement, data collection and communication
- Engaging schools over a 2 year period

Results to date are mixed: there is evidence that show the approach can be effective at maintaining engagement of the broader school community, integration of successful travel behaviour change strategies into school practices and achieving a reduction in car trips over the school year, however only a small sample of the original pilot schools remain involved.

The 'Perth Journey' narrates the evolution of the TravelSmart to school program and shares key learnings from the program.

1. Introduction

Programs targeting school travel can be effective at directly reducing the number of car trips to school and can lay the foundation for less car intensive lifestyles in the future. Often school based approaches have focused on in-class lessons (curriculum focused), the creation of a travel plan or one-off or annual events (ie walk to school days) without much consideration of how the school community will be engaged or how that engagement will be sustained over time (Ker 2009).

The WA TravelSmart To School program commenced in 1999 with the objective of increasing the number of children using active transport to school and decrease the number of trips made to school in private motor vehicles. A review of Active Travel to Schools programs was conducted in 2009 and used to develop the framework for a new monitoring, evaluation and delivery model for the Travelsmart to School program. This paper looks at trends in car use for the school trip and, in the context of the wide range of school travel programs, provides an overview of the evolution of the TravelSmart to Schools (TSTS) program in WA. This paper identifies key learning to date from the WA program and provides insights of how the program is continuing to evolve and develop.

1.1 Policy context for the WA TravelSmart program

Over the past 20 years there has been an increasing shift by governments towards travel demand management in addition to the traditional approach of provision of infrastructure and services as a response to increasing concerns about congestion, access, the high costs associated with the provision of transport infrastructure and increasing levels physical inactivity. In Western Australia, the Metropolitan Transport Strategy 1995 marked this shift in transport planning focus towards demand management with the establishment of mode share targets to reduce the growth in car trips, replacing these with more sustainable travel alternatives.

The focus on sustainable transport has continued to be an important element of more recent strategic transport and land use planning policy in WA. The Department of Transport's Strategic Plan 2012-2016 embraces the need for a sustainable transport system in its outcome statements. This is also supported by the Department of Planning through Directions 2031 and beyond (2010), which recognises the importance of walking and cycling as the most sustainable forms of transport and as a major contributor to community health.

The role of voluntary behavior change programs such as TravelSmart to alleviate the increasing pressures on our transport system by rapidly growing population and its associated costs (congestion, road safety, pollution, health impacts) is significant.

The WA TravelSmart suite of programs are focussed on how people make travel decisions. Well documented evidence indicates that lack of information about travel alternatives to car travel as well as misperceptions about the real cost, time/frequency, safety and comfort of the alternatives influence travel choices in favour of the car (Socialdata 2000).

Travel decisions are complex because they not only involve physical and economic factors, but also social and psychological factors associated with travel habits, family decision processes and emotions. The suit of programs delivered by the WA Department of Transport under the TravelSmart banner influences travel behaviour by addressing community and organisational cultural issues and the complexity of travel decision making processes in key settings where travel decisions are made or can be influenced. Key settings include schools, local government, workplaces and households. By working with individuals and in partnership with organisations and institutions the TravelSmart programs have led to changes in travel behaviour and the physical environment which support a more efficient and sustainable transport system.

Evaluation of the TravelSmart programs indicates reductions in traffic congestion on the road network in addition to a range of other economic, health, social and environmental benefits associated with reduced car use and more active travel (Ker 2009, Socialdata 2000, Marsden et al 2011).

School trips are particularly suitable targets for voluntary travel behavior change - on an average school day more than one in five cars on the road during peak hour in Perth are taking children to school and yet many live within walking distance and cycling distance. School trips represent a significant proportion of daily travel for many households and this, combined with the knowledge of proximity of most homes to school, represents an opportunity to affect significant change in transport choices.

1.2 Active travel to school- the benefits

There is evidence showing a real decline in the active travel behaviours of children over the past two generations. The 2008 UrbanTrans review of Active Travel to school programs reports that between 1970-2006 there was a 75% reduction in walking and cycling to school in Australia. Similar reductions have been reported internationally (Mackie 2009, Fesperman et al 2008, Love and Whiitzman 2012, Peddie and Sommerville 2005, Thomson 2009). This decline in active transport to school is thought to be a significant contributing factor to the declining rates of physical activity in school aged children and youth. Recent surveys in WA reveal that less than half of the school students met the recommended 60 mins of moderate to vigorous physical activity each day (CAPANS 2009, Martin 2011).

An increasing body of research suggests that Active Transport to School (ATS) initiatives provide an effective part of the solution to the problems of congestion, travel demand management, physical inactivity and increasing rates of obesity (Mackie 2009). ATS has the potential to make a significant

contribution to children's physical activity in the form of incidental exercise (Tucker and Stone 2012) and plays a key role in establishing healthy habits through making physical activity part of daily routines. Little is known about what impact ATS has on children as they get older – is this behaviour sustained over time? While longitudinal studies are required to provide strong evidence of the long term benefits of ATS programs, in particular providing evidence for sustained active travel behaviour, there is some evidence to support this emerging from Canada where ATS programs are well established.

ATS is increasingly recognised as playing an important role in combatting the problem of physical inactivity as ATS has the potential to reach population groups that are less likely to participate in leisure time or structured physical activity. That is, ATS makes physical activity achievable for those people who don't have the time, inclination, funds or interest in organised recreational activity (Fishman et al 2011). There is emerging evidence to suggest that countries with high rates of active transport also have high levels of physical activity generally (Basset DR. et al,. 2009). ATS is also positively associated with higher levels of extracurricular physical activity (Fesperman et al 2008). A 2007 study in Adelaide (Dollman and Lews 2007 cited in Fishman et al 2011) found that children who participate in ATS are more likely to travel actively to other destinations, which provides some support for the notion that ATS influences travel behaviour choices beyond school travel. A 2002 Taskforce on Community Preventative Services to Increase Physical Activity in Communities (USA) found that ATS was among the most effective interventions identified (Fesperman et al 2008). ATS can play a key role in setting healthy habits early, enabling students to experience modes of travel other than the car and therefore laying foundation for a healthy and sustainable future.

The benefits of ATS extend beyond reducing congestion and improving rates of incidental physical activity. In addition to the physical health benefits, numerous studies highlight the mental health, social and community benefits of ATS programs. (Tucker and Stone 2012, O'Brien 2008, Selman 2008, Rooney 2008, Thomson 2009). There is significant research to support the assertion that physically active children are healthier, happier, more ready to learn in the classroom, and more socially connected (WHO 2010, Stone and Tucker 2012 cites Garrad 2009). Social connectedness, social capital and trust of the school community both contribute to and emerge from ATS programs (Love and Whitzman 2012). Children walking to school facilitate a sense of social connectedness and trust which then encourages more parents to let their children also walk. Hume et al (2009) found that children whose parents knew many people in their neighbourhood were more likely to increase their active commuting. Socially connected communities build trust and social resilience (Lewis 2010 cited by Love and Whitzman 2012). Peddie and Sommerville (2005) note that the 'unexpected outcomes' of the Victorian school travel planning pilot included a range of positive outcomes beyond travel mode changes such as increased community connectivity and cohesion, expansion of friendship networks, improved relationships between schools and their local council and engagement of the whole school

community. ATS programs therefore potentially represent important tools for transforming communities and in particular disconnected and disadvantaged ones.

1.3 Summary of approaches taken to encouraging ATS

There has been a significant effort to reverse the trend of decreasing ATS in recent years through a range of programs both nationally and internationally, that have sought to facilitate behaviour change in the way children travel to school. Programs such as Safe Routes to School, Bike-Ed, Walking School Bus (WSB), Living Streets, School Travel Plan programmes in New Zealand and the UK, and the TravelSmart programs in Australia as well as one-off and annual events and promotions are all aimed at reducing car trips and increasing walking and cycling (and in some instances public transport trips) to school.

Approaches and strategies adopted by government and non-government agencies delivering ATS programs in Australia and overseas were reviewed in 2008 (UrbanTrans 2008) and again in 2011 (Fishman et al 2011). The 2011 report prepared for Health Promotion Queensland focussed on the cost and benefits of Active transport in QLD including ATS programs. The 2008 UrbanTrans report focussed on the school travel programs delivered in Australia, NZ, USA and UK. Both reports found considerable variation in the delivery, implementation, reach and outcomes of sustainable transport programs focussed on school based travel. These differences were not only evident between programs but also within programs (ie. between schools). Factors affecting outcomes include schools engagement, social, cultural factors and the built environment.

There have been a significant number of ATS programs developed and implemented both nationally and internationally with varying success. Common barriers to success are the built environment and parental perceptions of safety (access and personal). Programs seeking to improve ATS have developed around mitigating these barriers. For example, the walking school bus (WSB) program is a tool to combat parental fears related to allowing their children to walk to school. The WSB program provides a safety net – so children can walk to school but in a controlled manner (designated route and time) with parent and peer supervision (Kingham and Ussher 2008).

Parental perception of how safe it is for their child to walk/cycle to school is closely linked to traffic speed and volume (Hume et al 2009, Thomson 2009) . Higher volumes of traffic lead to increased perception that the neighbourhood is an unsafe environment. The typical chaotic scenario outside school gates during peak drop-off and pick-up times gives support to the perception that the school neighbourhood is not a safe environment for children to walk or cycle to school in. The irony is that this is caused by the parents not only creating local traffic congestion outside the school, but also often compromising on safety by double parking, allowing children to enter/leave the car on the incorrect side of road or between idling cars. One-off or annual event days

such as walk to school day, which are a common feature in most ATS programs, are an attempt to highlight this incongruity to parents in an experiential manner by enabling them to experience how safe (less traffic volume and chaos) it 'feels' when less people drive their children to school. One-off or annual event days such as these will not lead to long term behaviour change, however the impact of such events can be significant (light bulb moment for some parents), and can be used to launch longer term behaviour change initiatives within that community. Programs such as safe routes to schools and Bike-Ed have been developed to encourage safer walking and cycling. Whilst these initiatives remove barriers, and assist with parental perceptions of safety, there is little evidence that on their own they provide the motivation required for sustained behaviour change to occur. They are part of the solution to traffic management around schools but do not address the key issue – mode choice.

1.3.1 Access and school travel plans

School travel plans have been trialled in North America, Europe, Australia and New Zealand with varying application and degrees of success. Data collection is a significant barrier in assessing the effectiveness of travel plans (Sullivan and Percy 2008). Peddie and Sommerville (2005) note the range of benefits of the Victorian travel planning pilot program 2003. O'Fallon (2007) suggests that the expectation that schools should develop a travel plan is 'problematic' and data from the UK where school travel plans are mandatory is varied. Ker (2009) concluded that mandatory plans do not always translate into action and that voluntary programs with a range of initiatives that can be selected by school communities to suit their situation are best able to achieve broad ownership and support.

There is an emerging body of research on the characteristics of the neighbourhood environment that facilitate or discourage walking and cycling to school and how infrastructure is associated with ATS and overall physical activity levels. Giles-Corti et al (2011) found that primary school children were more likely to walk to school in neighbourhoods with high street connectivity. However, when connected streets are designed for heavy traffic the potential for children to walk to school is reduced. While the evidence suggests that the built environment has a significant impact on active transport, questions still remain over the extent to which provision of improved infrastructure alone results in actual behaviour change. For example, how much do parental perceptions shift when infrastructure improvements are made and is this enough to make significant behaviour changes related to school travel?

Parental survey data consistently indicates that concerns over safety and lack of appropriate infrastructure (paths, crossings etc) are the basis for their decision in not allowing children to walk or cycle to school. (tsts surveys unpublished; Cycling Promotion Fund 2012). Mackie's (2009) findings supports earlier research that there is a latent demand for cycling (and walking) to school, the main barrier being that parents perceived the risks as greater than the perceived benefits and suggested that more attractive cycling networks combined with cycle training, provision of effective storage and

lower speed zones around schools would significantly improve numbers of children cycling to school.

In addition to perceived safety, parental perceptions of distance significantly influence participation in ATS. Parental perception of distance is a real barrier to children walking to school. International and national data support this (McMillan et all 2006, Timperio et al 2006). But what is the impact of their own inactivity, or health status on this perception? Is it really too far for children to walk or is it that parents themselves consider it too far? Parental perceptions of appropriate travel distances have changed significantly in the past 2-3 decades. What was considered a reasonable waking distance to school one generation ago is now thought to be too far and unreasonable. This is bourne-out by the fact that in reality the majority of schools in WA have a catchment area of 1-2 kms which is within a comfortable walking and/or cycling distance for primary school aged children. However, when surveyed parents consistently cite distance as a barrier to walking or cycling to school. Further research is required on children's and parents perceptions of their environment and the impact that this has on ATS.

The importance of school (all levels from principal down) and parental buy in is outlined in several ATS program reviews (Peddie and Sommerville 2005; Hughes and Di Pietro 2005; Fesperman et al 2012, Ker 2009). Hughes and Di Pietro (2005) note that the whole school approach is essential to the success of any ATS intervention. This is supported by literature on school based interventions (health promoting schools) as well as emerging research on ATS programs: "the process for engaging schools is as essential as delivery" for without any real commitment to and understanding of the program by key stakeholders there is likely to be limited success (Hughes and Di Pietro 2005).

An important element to school support for initiatives is linked funding. Fesperman et al (2008) lends support to the idea of upfront funding to schools for ATS initiatives and this is supported by anecdotally (TSTS feedback from school coordinators) and empirically in other successful WA programs (SDERA, AirWatch, Healthy schools).

Fesperman et al (2008) identified lack of preparation, planning and weak promotional efforts as barriers to schools succeeding in ATS initiatives.

Review of the literature suggests that there is still much to learn about what works, for whom and in what environments. What is apparent however is that ATS is best addressed through a comprehensive suite of strategies – policy, programs and services, promotion and education, engagement, social and built environment combined with a whole school approach and an emphasis on engagement strategies.

2. The WA TravelSmart Schools program

The WA TSTS program has developed using a flexible and innovative approach that incorporates many learnings from the national and international ATS programs discussed. This section outlines the approach taken with TSTS

in WA, changes that have been made to the development and delivery of the TSTS program in recent years and some of the opportunities and challenges in moving forward.

2.1 A brief history of TravelSmart to School in WA

The TSTS program was first developed jointly by the Department of Transport and the City of Melville and trialled at Kardinya Primary School in 1998. The purpose of the trial was to raise awareness about the impacts of high car use and to encourage children to find ways of reducing car use in their community and in particular traffic outside their school at pick-up and drop-off times. A specialist environmental educator (from a local NGO Kids Helping Kids) was engaged to work with the school to develop a range of curriculum activities over a school term. The program was based on the idea that if children are given the opportunity to explore how car use can be reduced then they will have a sense of empowerment whilst assisting in the education of the school, parents and the wider community. The students in the classroom had not really ever considered why they went to school by car. When asked many were unsure as to why. The trial culminated in a TravelSmart to School Week where the children with the assistance of their parents used alternative means to get to school. Over the week car trips to/from the school reduced by 22% (John and Wake 1999).

The success of the initial trial lead to a long-term relationship between the Department of Transport and the local environmental education NGO Kids Helping Kids, later re-named Millennium Kids Incorporated (MK) which continued to deliver and improve the program until 2008. Over this period the program focused on working with a core group of students in participating schools to develop their leadership skills and ability to provide support so they could develop and implement a TravelSmart plan of action in their schools, culminating in a TravelSmart to School Week. The TravelSmart to School program was designed to run over a 4-5 week period in Term 2 or 3 of the school year. The TravelSmart to School program included:
- A two-day 'Sustainability Roadshow' to introduce a core group of students from participating schools to the program and develop their leadership skills;
- Professional development for teachers, and a curriculum-based TravelSmart to School Kit. This kit included activities linking with the Western Australian Curriculum Framework and resource sheets;
- Access to a motivational play
- An on-line web-based survey tool where students entered their results, which were graphed instantaneously;
- Trained Millennium Kids mentors who provided practical support to students in the implementation of their TravelSmart plan of action; and
- Prizes for schools that achieved the best results from the TravelSmart to School Week.

The program took a couple of years to become established and began to find strong support in the school community. Between 2002 and 2008 the TSTS program had reached 18,578 students across 235 schools saving an

estimated 34,000 vkt and abating 10,505.8 kg of Greenhouse Gas Emissions. The number of schools participating each year varied between 10 and 58 schools subject to availability of partnership funding and in-kind support from the Federal Government's "Local Greenhouse Action Program" fund (2003/2004) and WA Health Sector, former Physical Activity Taskforce, special funding allocation (2006 to 2008) for programs to address over weight, obesity and in-activity in children. In-kind and funding support was also provided by some participating local governments.

Due to a change in strategic direction, MK advised at the end of 2008 that they would not be able to deliver the TSTS program from 2009 onwards. This presented an opportunity to review the program model.

Feedback from MK, local government partners and from focus groups with teachers and parents supported the following elements being considered:-
- A longer term approach is needed. A 10% reduction is good over short term – but what about longer term? (MK)
- Need a method of collecting the rich data of how schools are actually achieving the behaviour change. It is hard to establish what schools are doing beyond survey results. (MK)
- Delivery and data collection to reach 60+ schools annually is not viable (financially sustainable) under service level agreement funding arrangements. (MK)
- Need more communication between schools, DoT and LGA – better use of I.T. (MK)
- Need simple results reporting (and incentives to report). (MK)
- Payment to schools for relief teachers to permit professional development and workshop attendance is vital. (teachers).
- Need the school principal on side (not just a single teacher). (teachers).
- Need a range of incentives available for teachers - kids do like "stuff" and teachers can too. (teachers).
- Use of interactive website better than paper reporting (if access is secure). (teachers).
- Focus more on health benefits. (parents).
- More focus on providing coordinated approach and materials. (local government).
- Needed better incentives (carrots, as sticks are not available). (local government).
- A 'stepped' approach is needed (to keep simple and provide ongoing incentives). (local government).

2.2 A new approach – TravelSmart to Schools Intensive model

2.2.1 Development of the new model

A research consultant was engaged to conduct a review of national and international literature and to make recommendations on a preferred approach focusing on demonstrated evidence of what type of interventions work, engagement strategies for teachers and parents as well as strategies to embed ATS in the school culture with minimal on-going input from the

Department. This research indicated that a variety of travel behaviour change initiatives have been delivered to schools in Australia and overseas. Recommendations from these studies identify 3 main characteristics that are required for behavioural changes to occur and be maintained long term. These characteristics are: (a) intervention periods of at least 2 years; (b) interventions that have broad support and target children, teachers, and parents; and (c) interventions that explicitly link infrastructure changes to the behaviours they are attempting to change (Ker 2008). Research also supports a multidisciplinary approach that develops promotional material, resources, school support and environmental changes to sustain factors that influence parental buy-in' (Ker 2008, Fesperman et al 2008).

An integrated package of measures is fundamental to assist local governments and the school community to (a) remove barriers to and educate about active travel, (b) promote reduced car use for the school trip, and (c) develop supportive school policies around active travel.

2.2.2 Model framework

The TravelSmart to School program takes a whole school approach, based on the AIRES *Framework for Environmental Education for Sustainability* (2005).

Program inputs and outputs are focused to facilitate change through the six key program elements of networks and partnerships, governance, physical surrounds, resource management, teaching and learning and curriculum organisation (figure 1).

Program inputs include:-
- Facilitation of action plan development and implementation through:
  - Workshops to support student leadership and action planning, teacher professional development on curriculum activities and use of information technology to achieve change
  - Publications – e.g. TravelSmart to Schools Kit to outline class activities, case studies, complementary programs and resources
  - Paid teacher relief time
  - Access to shared resources (e.g. flags, banners, road marking stencils, badge making machine)
  - Merchandise incentives for students
  - Cycle training (part funding)
  - Connecting to annual walking and cycling events
- Incentivisation to progress through the program levels, e.g.
  - Progressive access to funded elements
  - Regular competitions
  - Recognition through Bronze, Silver etc, achievement certificates and school signage and annual showcase and awards ceremony
- Communication and information exchange through building a network of delivery agents (TravelSmart officers etc) and on-going development and moderation of an online network through the NING social media site and e-newsletters (www.travelsmart-to-school.ning.com).

Figure 1 Whole School Framework
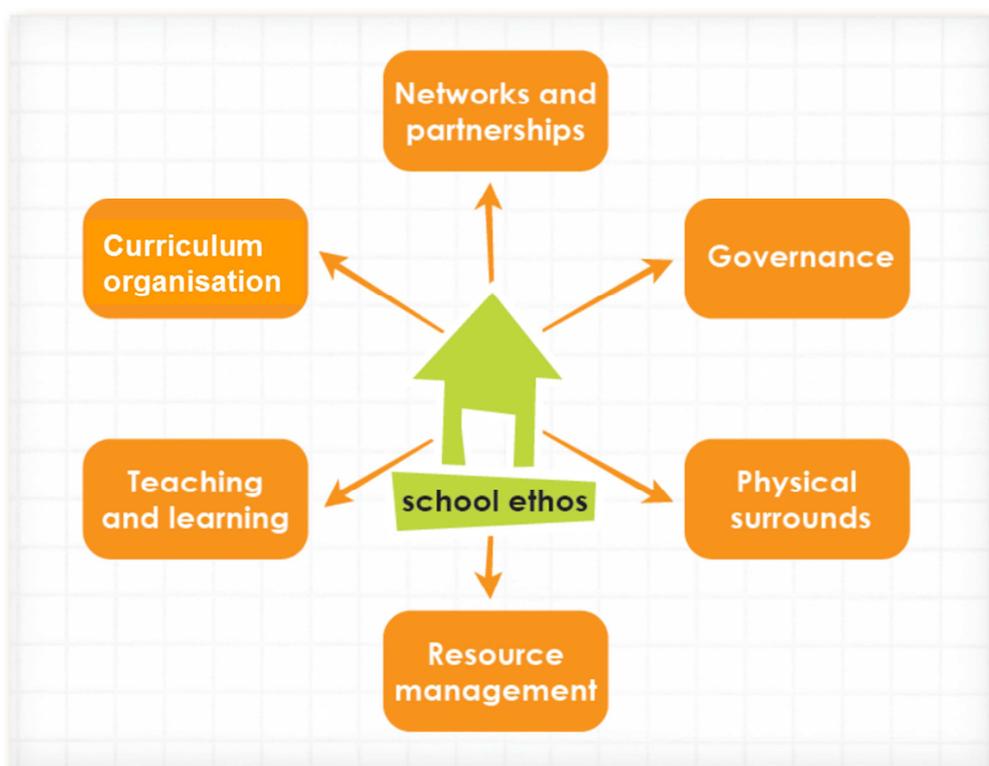
The program leaders from the Department of Transport, and where possible the Local Government TravelSmart Officer, work with a TravelSmart team for each school (ideally made up of teachers, parents, students) to develop skills and provide resources to address issues associated with traffic specific to their school. This approach assists the school community in identifying which issues they want to target and the strategies and approaches they wish to use.

The new model was designed so that schools develop and implement a staged two year action plan following the seven stages and four levels illustrated in figure 2 below to build capacity for long term sustained travel behaviour change. The levels approach provides strategic short and long term goals and the opportunity to build and develop the program as the school community builds its capacity. As schools make progress through the program they are awarded recognition (Bronze, Silver, Gold, Platinum) – with each level attained schools gain access to additional program benefits/rewards.

Figure 2 Model Stages and Levels
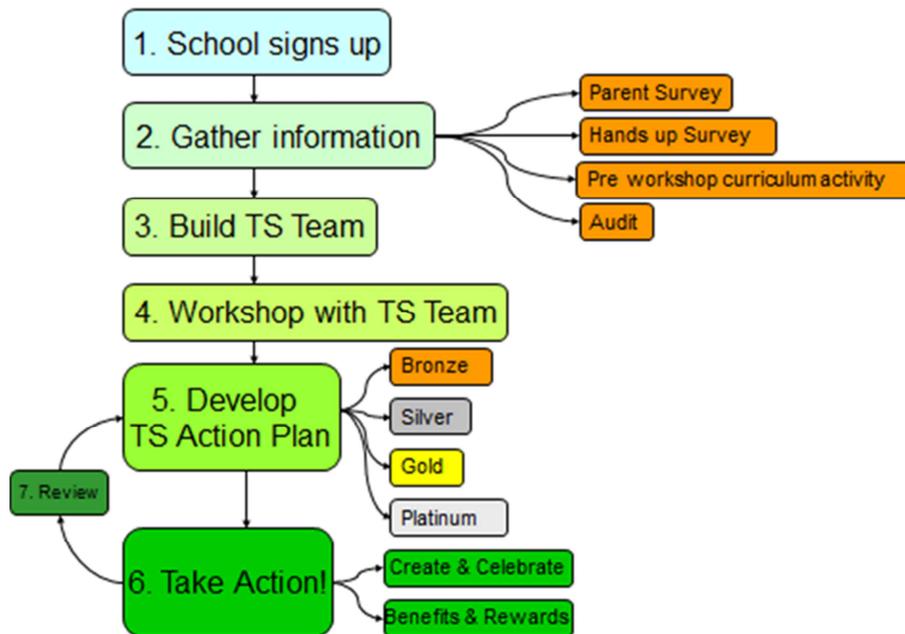
2.2.3 Implementation of the new model

Delivery of the new TravelSmart to School pilot commenced in January 2010, initially for two years, extended for a third year until the end of 2012. The objective of *TravelSmart to School* pilot was to reduce the number of car trips generated by school communities by 10 per cent and accordingly increase the number of walk, cycle and public transport trips.

Due to its pilot status expressions of interest were called from local governments to participate in the program through the Local Government TravelSmart Officer Network. The expression of interest required local governments to engage one or two local and to provide in-kind support (officers time) to assist with facilitation of action plans and coordination of surveys and data collection. A total of six local governments and 10 primary schools signed up to participate in the two year pilot program.

The pilot program was developed with the intention that DoT staff and Local Government TravelSmart Officers would meet with participating school TravelSmart Teams to provide tools and resources to support schools.

Of the 10 schools that commenced in the pilot program in 2010, three continued the program over 2011 and into the 2012 school years. An additional three schools joined the program during 2011. The 2012 school year saw three schools working on achieving silver level, one gold level and two platinum level.

In 2010/2011 the participating schools in the pilot program achieved a 9.9% decrease in car trips; bike trips increased by 64% (from a very low base); walking trips increased by 5%.

2.2.4 Lessons learned

The pilot program phase has adopted a reflective and dynamic process, enabling changes to be made based on feedback from key stakeholders (TSOs, TravelSmart teams and school administrators), adoption of opportunities as they arose and ability to accommodate challenges as they arose. This resulted in some significant changes to the original model as the pilot has progressed.

The number of schools that dropped out of the pilot due to natural attrition, administrative burden of the program and inconsistencies in support personnel was higher than anticipated and required a reconsideration of the pilot design. It became apparent that the time required for the 'levels' based approach was problematic and that it was difficult to retain and recruit new schools due to the perceived time and administrative burden. Furthermore, while the original intention was for the TravelSmart team to be representative of the whole school community (parents, teachers and students) this was often not the reality and the burden was increasingly falling to school teachers.

Feedback from Local Government TravelSmart Officers, schools, teachers and parents resulted in changes to the pilot in 2012. The key issues identified were:
1. The difficulty of maintaining sufficient level of commitment from some schools to the program including support from Principals and teachers.
2. Some teachers found the data reporting requirements too much of a burden on top of existing workloads.
3. Some schools found they were not able to honour their original commitment to the two year-long pilot program.
4. Changing priorities meant that some Local Government TravelSmart Officers were not able to continue to support the program beyond the first year.
5. Some TravelSmart teams were not reflecting 'whole school approach' and teachers were being over burdened with responsibility of delivery and reporting on the program

3. Moving Forward

Lessons learned from the intensive model pilot over the 2010 and 2011 school years together with opportunities from integration with related programs have led to a number of additional areas of focus for the TSTS program over the 2012 school year and beyond.

3.1 TravelSmart to Schools Light model (reach focus)

This model will test if program reach can be increased (engaging additional schools) whilst still achieving reduction in car use at participating schools despite changes to the process outlined above. The light model will be limited to a range of easily accessible self-help tools and resources, with some limited access to the resources, competitions/rewards. The emphasis is schools choosing elements of the program that suits them and not having to complete the more stringent milestones or levels of the original pilot. The most significant elements to change in this model are the limited 'face to face' assistance at schools and less onerous data collection with a stronger focus on data collected through the TSTS program social media blogs (NING) by participating schools together with participation in events and competitions, case studies, focus groups and limited survey data. Resource kits complete with activities, rewards and incentives and practical information ('How to …' sheets) will be provided to schools based on their identified needs and foci.

Experience thus far suggests that different engagement methods should be used according to schools specific needs. The emphasis in the 'light' model is enabling schools to choose specific activities (eg event days) and approaches that meet their needs, whilst encouraging them to move towards the more sustainable and long term action plan approach which will be rebadged as StRide Ahead. This approach will meet the needs of schools and school communities that wish to take action on school travel issues without the requirement to participate in an intensive 2 or 3 year program. It is anticipated that this approach will reduce the attrition rate evident in the intensive model pilot.

3.2 StRide Ahead model (integration into school culture).

The StRide ahead model is a rebadging and modification of the approach adopted in the 2 year intensive pilot. It will focus on encouraging school communities to move away from event days, and towards adopting more long term strategies to facilitate walking and cycling to school. The intention is that schools that are engaged in the light model will be supported and encouraged to take on this more intensive approach as their TSTS teams become more confident and capable. The focus of StRide Ahead is more long-term sustained behaviour change strategies rather than one-off or annual events only. School communities will be encouraged to develop an action plan. Schools will be supported with Bike Ed, teacher professional development, staff assistance, incentives/rewards and communication support.

3.3 NaturePlay WA (student focused model)

In 2012 an opportunity arose to participate in a more student focussed approach to promoting active travel to school through the NaturePlay WA passport initiative. Through the passport initiative students are encouraged to undertake age appropriate missions such as 'walking to school' in a creative way that encourages them to be physically active while connecting with nature. The passports are available to individuals on request and therefore

are not reliant on school support or participation in a program. This marks a significant departure from the traditional school focussed approach that has been adopted by TSTS.

3.4 Connecting Schools pilot program (cycling focused model)

In Australia much of success of ATS programs has been in generating walking trips (Fishman et al 2011 and UrbanTrans 2008). The draft WA Bicycle Network Plan 2012-2021 recognises a significant opportunity to increase cycling to school at both primary and secondary levels and proposes a Connecting Schools pilot program which is intended to investigate methods to increase cycling to school in both primary and secondary schools. Key elements of the program will include the provision of improved cycling infrastructure and behaviour change strategies. A new priority stream is proposed to be introduced into the Perth and Regional Bicycle Network Local Government Grants Schemes, allowing local governments to apply to improve cycling infrastructure accessing schools. To add value to this infrastructure schools will participate in the TravelSmart Schools program.

3.5 Connecting with youth (secondary school focused model)

To date the emphasis of the TSTS program has been on primary school aged children. There is a need to investigate and test strategies and approaches aimed at engaging secondary school aged children in active travel. Some preparation work was undertaken with the Arthur Orsini youth leadership workshops conducted with several schools in 2011. It is proposed to build on these experiences and develop tools and approaches that connect with secondary school aged youth. The TSTS program will continue to build expertise, working directly with a small number of schools, where opportunities arise, to deepen knowledge of engagement techniques and tools that work with secondary schools. Of particular interest will be assessing the impact of students that had been engaged in ATS initiatives at primary school and whether this has any flow-on effect to their travel choices when moving to secondary school.

4. Conclusion

It is evident from the literature in the fields of ATS and community health that the development of the WA TSTS program is not only underpinned by the success factors and principles from national and international best practice but has also contributed to these learnings.

The TSTS intensive pilot has shown some success in engaging students and school communities in ATS. Experience from the pilot suggests that different engagement methods should be used according to schools specific needs. Identifying schools unique needs and foci and then highlighting the links that these programs or approaches have with the TSTS program is essential. The schools that are currently participating in the WA TSTS program have approached the program from different perspectives and have adopted a

range of unique strategies that have resulted in multiple outcomes including travel mode change.

The broad range of cross-sectoral benefits of ATS programs provide potential for cross-promotion, partnerships and joint funding opportunities and there is an opportunity to collect data that would support greater investment and partnerships from health and road safety in particular. Developing additional partnerships and securing sufficient budget to extend the program reach beyond small-scale pilot projects is an on-going challenge into the future.

The TSTS program will continue to investigate and develop new ways of engaging schools and developing strategies that meet their needs whilst promoting sustainable and active travel having regard to the range of unique challenges of delivering ATS programs in the schools setting including:
- Cutting through the clutter & multiplicity of programs on offer to schools
- Flexibility in program design and delivery to meet the different needs, levels of commitment and priorities of schools
- Retaining schools in the program over time as students, staff and parents move through the education system
- Finding a balance between administrative burden for teachers and collection of sufficient (rigorous) data to evaluate the program
- Legal (ie. duty of care) and administrative issues associated with schools promoting activities outside of school hours
- Disparate institutional responsibilities in relation to addressing barriers to the physical environment and program delivery and the ability to influence and aligning removal of physical barriers (ie. safe road crossings, paths, etc) with TSTS program delivery.

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