

WALKING SCHOOL BUS AND THE ROAD SAFETY

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Abstract

In the current climate of conventional fuel crisis, emissions of pollutants, traffic congestions, emphasis is given to the alternative modes of transport. One of the initiatives supported by the Australian Government as part of Sustainable Transport Strategy where range of tools and resources are used by local governments to promote healthy habits among the population and reduce current traffic congestion around schools is the Walking School Bus Program (WSB). This initiative has been promoted and supported by YWCA of Canberra, (YWCA is part of a global women's network that is responding to the needs of women, their families, children and young people). It has been funded by the ACT Department of Health and supported by few other Departments within the ACT Government.

A Walking School Bus is a group of primary school children who walk to and from school along a safe and enjoyable set route, accompanied by a minimum of two parent driver/supervisors per 'bus'.

In the ACT WSB has experienced significant growth over the last few years, with the number of children and schools actively participating in the program increasing. There has been a 20% increase in the number of schools participating in the WSB program for the last year. The ACT Government support the program through:

1. Road Safety Education Campaign
2. The Road Safety engineering improvements for the risks and hazards identified and assessed by traffic professionals.

This paper will elaborate Road Safety education and Road Safety engineering improvements in ACT through involvements and practical examples.

Key Words: Road Safety education Road Safety Engineering treatments, Walking School Bus.

Preamble

The journey to school is not a simply a journey from point A to point B.

It can be a process in which individuals interact, in which children learn essential life skills such as exploring and discovering the neighborhood, social interaction, health benefits and of course road safety skills. There are many programs around the world with the emphasis on developing sustainable transport initiatives.

Internationally:

- Walk to school month October
- Green Communities in Canada, national network nonprofit organizations that promote active and safe journey for school children to and from school.
- Walking school bus in England and New Zealand

Australia:

- In Australia there are several initiatives and programs that encourage safe walking and cycling to school such as Walk to school Walktober, Pedal Pods or cycling school buses, Bicycle education programs under the Travel Planning program.

The aim is that walking and cycling is integrated as part of a culture where individuals choose alternative modes of transport and are not car reliant from a young age.

This also becomes a well accepted culture of living creating healthy, efficient and sustainable communities

Introduction

There was an interesting research conducted by the Australian Centre for Physical Activity

and Health for trends in children travelling to school from 1971-2003

In general major findings were that children walking to school gradually declined from 57% in 1971 to 25.5% in 2003*

On the other side children driven to school gradually increased from 22.8% in 1971 to 66.6% in 2003*

Coincidentally some data from medical researches around Australia shows that there is increase in type two diabetes and obesity especially among the young children.

At the same time there is an ongoing debate of increased greenhouse emissions including carbon dioxide and other pollutants.

Last few decades as road users we have been experiencing increased traffic congestion on roads especially around the schools in a peak time.

The Walking School Bus initiative has been informally adopted in many jurisdictions. It is based on encouraging walking and cycling from an early age so that the ever increasing trend of increase use of a car may be reversed.

Travel Smart Program

The Australian Government, in collaboration with States and Territories has introduced a variety of programs to tackle this problem with the introduction and promotion of new initiatives under the National Travel Behavior Change project.

The WALKING SCHOOL BUS initiative is a small component of the TRAVEL SMART program in the ACT under the National Travel Behavior Change Program.

Although the WSB is primarily supported by volunteers' parents, the Department of Health and the Department of Education within the ACT provides in-kind support to the program. This program has also been strongly supported by the ACT Governments and is part of the Sustainable Transport Action plan 2010-2016 with established targets to increase the use of sustainable transport modes and at the same time encourage walking and cycling with the aim of reducing the currently high dependence on private motor vehicles for transport in the ACT.

What is a Walking School Bus (WSB)?

Walking School Bus is a program that encourages primary school children to walk to and from a school along safe and

enjoyable route accompanied by minimum of two parents – one at the front and one at the rear of the “bus”. This program is supported by the ACT Government (ACT Health Promotion Grants Program). It employs two part time staff WSB picks up “passengers” along the way at designated “bus stops” and takes them along the safe and enjoyable route to the school.

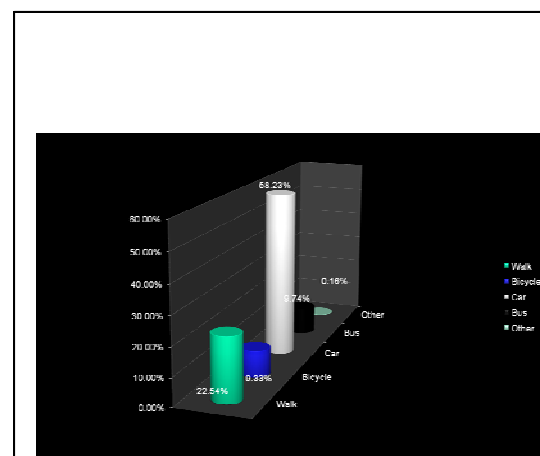
It is run by volunteer parents and is funded by the Department of Health. It employs two part time staff within YWCA – (young woman achieving their potential) <http://www.ywca-canberra.org.au>). They are responsible for managing the program and helping schools to set up and maintain walking school bus. Most routes are about 1.5km long with around 20-30 minutes to get to school. It operates as frequently as volunteers are available to lead it.

All walking routes are assessed for safety by traffic professionals.

All volunteers undergo a police check and are provided with public liability insurance.

This program can be flexible to suit the needs of families using it. It can be tailored to suit families and their travel patterns and the travel needs. The bus can go from one day a week, as many participating school start and progress to every day of the week. It can be flexible as the needs for walking and number of children increase. This also depends on the volunteer's availability and community involvements. The most successful routes have greater involvement from the volunteers and great support from the community.

Walking School Bus Canberra statistics-1



WSB data YWCA -Canberra 2008

The School Travel Survey (devised by the Australian Association of Mathematics Teachers for the National Literacy and Numeracy) was conducted to collect information about how children travel to school

The ever increasing trend of car use leads to obesity from young age, decreased fitness, a perception that car is the only form of transport, poor road and pedestrian skills and difficulty in navigating around their own neighbourhoods;

The increasing trend of car use is also contributing to the traffic congestions around schools, increased greenhouse emissions, and poor air quality.

It also resulted in less social interaction between the children and the community. This information is used by many schools to highlight some of the problems associated with high car usage. It is used to introduce the Walking School Bus programme to the school community.

This program is an active, safe, fun and free way for children to travel to school.

A minimum of two volunteers walk along a set route to the school picking up children along the route.

There is a timetable so the parents and children know when the bus "arrives" at a particular stop

The programme is operating in a number of schools in Canberra. It has been found that children and volunteers enjoy walking and that children develop good road and pedestrian skills. They also develop good social skills.

The data survey was conducted in 9 participating schools across Canberra and the data shows an average 58.2% of the participants used car (this trend is similar to the other Australian cities). Walking to school accompanies for 22.54% of the participants. Bus and bicycle users are around 10% of all participants.

We have also compared the latest census data from 2007 (ABS) with the WSB survey and revealed some interesting findings:

The highest percentage of children driven to school was in the 'wealthier' suburbs (73%). Schools that have developed a strong link with the community groups and have well organised and established network of volunteers have lowest percentage of car dependency. (44%)

Walking School Bus statistics-2

It has been experiencing significant growth over the past year. 18 out of 98 Primary Schools in the ACT are actively participating with many more expressing their interest to join.

18 existing participating schools facilitated 33 routes and walked 71 times per week.

The number of children participating in the program has reached the 300 mark for the first time.

From 2007 to 2008 there was a 20% increase in the number of schools participating and a 22% increase in the number of routes being walked, and a 16% increase in the number of walks each week.

There is of course a seasonal dip during the colder months June, July and August. The walking numbers always improve as the weather warms up and go on to exceed the walking numbers of the previous year's summer months.

However, there are some constraints to the WSB program:

- Lack of time: many parents have a busy working schedule and it is really hard to find that ½ hr time to walk.
- Convenience: it is much more convenient to get in the car and drive to school; no preparation for walking is needed. This of course creates traffic problems on the way to school (each parent drops off children as close as possible to the school at the same time).
- Lack of volunteers: In some areas such as the new suburbs with young families there is a strong parent network connection and number of volunteers is exceeding the given requirements while in others especially established and old suburbs WSB is experiencing decline in the number of volunteers.
- Stranger-danger, many parents do not want to let their children walk out of fear of abduction.

Roads ACT-support Road Safety

The ACT Road Safety Strategy and Action plan are designed to address key road safety issues in an integrated way using the 4 E's: Education, Encouragement, Engineering and Enforcement strategies

Safer roads and roadsides and safer users and safer behaviors are also part of the ACT Road Safety Strategy and Action plan

Roads ACT-support Road Safety

- **Safer Roads:**

Fewer cars on the road minimize the congestion and accidents especially at peak hours.

Traffic engineering treatments include use of existing facilities for safe walking and cycling and building new ones to achieve the objective of encouraging walking and cycling. Through the road safety children are encouraged not to cross the road where there is a risk of collision with vehicles.

- **Safe Road Users and Safer Behaviors:**

The objective is an improvement in children's road safety awareness and pedestrian skills by practical learning. Children become more responsible road users by walking on safe footpaths and helping smaller children teach them responsibility for others.

It also increases children's ability to judge distance and speed when making decisions to cross roads. This ensures that roads are crossed at the safest place.

Often in a peak hour drivers are distracted by rushing to work and it is a great benefit the reliance on children's skills to avoid accidents when drivers are distracted.

Providing children with safe passage to and from school by walking safe routes that have been assessed by traffic professionals and have reasonable distance (no longer than 30minutes) may influence travel behavior patterns from an early age.

From an early age children are aware of sustainable travel alternatives. They learn that the car is not the only travel alternative to go to school.

There are some other benefits such as:

- Reduced greenhouse emissions,
- Increased social interaction,
- savings for fuel costs,
- Health benefits.
- Vic health has produced a WSB quantification tool that calculates the benefits in all above categories.

Encouraging walking and cycling may influence the change in habits where the trend of children being driven to school may

be reverted and the habit of "walking to school" re-established.

Roads ACT-support Traffic engineering treatments

Each route is walked with the volunteers and assessed by traffic professionals.

The route is then assessed using available data for speed, volume, traffic crashes and... lots of common sense

The outcomes of such assessment are providing safe alternatives such as:

- Re-routing of existing paths
- Providing advice and warning signs.
- Infrastructure improvements- footpaths, pram-ramps

Roads ACT-support Traffic Engineering treatments- Re-routing



The shortest route is not necessarily the safest one.

It was brought to Roads ACT attention that this route crosses two major collector roads. The first road although with a medium island that serves as a protection to pedestrians and cyclists, had a less than minimum sight distance for the approaching vehicles. The crest on the eastern side of Dixon Dr also contributed to the reduced sight distance.

Instead of improving the crossing facilities on both roads it was decided to re-route and repair the existing crossing facilities on the eastern side of the intersection on Dixon Dr. This route although few meters longer, has better sight distance and the road is crossed only once.

After some additional footpath modifications the new crossing point is some 10 meters longer but safer.

Roads ACT-support Traffic engineering treatments- Advice, signs

Sometimes the solution is as simple as a few shrubs being trimmed to improve visibility and sight distance. The problems with the overgrown shrubs are a common in Canberra.

In other occasion children were anxious that the "red man" appears before they cross a busy two way (three lanes each direction) arterial road with a median. The initial solution was to change the timing of the traffic lights. However, this change could cause significant traffic delays on the arterial road especially in a peak hour.

By walking the route it was revealed that the children were trying to cross 6 lanes and a median during the one green cycle. It was advised that the WSB cross the first three lanes in one go and wait in the median for the next green cycle

In many cases due to the curvature of the road the sight distance was reduced and, warning signs were erected in advance to increase driver awareness.

Roads ACT-support

Traffic engineering treatments

Infrastructure improvements

Issues:

This route is a very active and is used by the wider community, pedestrians and especially cyclists. The existing path had reduced visibility due to well established trees and shrubbery. Complaints were received in the past and warning signage as well as slow points on the footpath were constructed to slow/stop the pedestrians/cyclists before they cross the road.

It was also noted that cyclists and pedestrians were exposed to conflicts with vehicles at the crossing point and pedestrians and cyclists were walking along the street creating potential conflicts with cars.

Roads ACT-support

Traffic Engineering treatments

Infrastructure improvements

Result:

New path was built with the associated pram crossings some 17m east from the existing one. The sight distance and visibility improved significantly so the new path did not require any warning signage and slow points. An extra footpath was constructed parallel to the street and the walking/cycling on the street was completely eliminated.

Roads ACT-support

Traffic Engineering treatments

Infrastructure improvements

This project required extensive consultation with the local community. Interviews with the local residents were conducted as well as the members of the Local Community Council. Few options were presented including the one with the footpath running across the parkland.

This project received strong support from the Local Community Council and is being regularly used by the WSB group as well as the cyclists.

Consequently, members of the community requested this footpath to be continued to lead to the local shops. This project is currently in a 2010-2011 footpath improvements list.

Conclusion

WSB is a small and positive initiative that relies on volunteers and Government Grants. Its contribution is evident in improved health, greater social skills and Road Safety skills learned from an early age, in a fun and safe environment.

This program is proud of the way it strengthens Canberra social network. It receives feedback on a regular basis from its volunteers about how much they enjoy participating in the program, the benefits they and their children experience and the friendships that have resulted not only between the children but parents as well. Sociological factors such as bringing communities together, sense of responsibility and creation of friendship between the

children as well as many parents that have formed lifelong friendship through the WSB are some of the non quantifiable benefits of this program.

How can we all help?

As a parent:

We can find out if our child's school runs a WSB. We could offer to be volunteers. It requires bit more discipline and organization at the beginning but it is a great fun. There is also a thought to engage even the grandparents to assist with the volunteering in the WSB.(In which case stranger-danger constraint would be eliminated)

As a driver:

We are alert to the signs for school zone, signs for reduced speed limits, signs for pedestrians. I believe that simply by seeing more children on the road we would be more alert and slow down.

As traffic professionals:

Roads ACT together with ACT Health and Dept of Education strongly encourages and supports the WSB program.

As professionals we have duty of care to provide safe environment for walking and cycling and at the same time to be inviting and safe. The ultimate goal is that the exponentially increasing trend of car use can be reversed.

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