

Silhouette Children reducing driver speed near schools

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Melville Primary Students and their attention grabbing Silhouette Children

Abstract:

The number of drivers exceeding the speed limit on a District Distributor B class road in front of Melville Primary school has been almost halved during this ‘**Silhouette Children**’ initiative.

The Silhouette Children encouraged drivers to slow as they were welcomed into the school zone with colourful life-size cardboard cut-outs of school children, students monitoring vehicle speeds and a Speed Display Trailer.

The Silhouette Children concept was developed in direct response to repeated parent, school and Local Government concerns of vehicle speeds affecting student safety and eroding parent confidence in allowing their children to walk and cycle.

The Silhouette Children improved driver behaviour even when silhouettes were not in place (Phase II). This involved parents signing ‘Speed Limit Promises’, parents displaying car bumper stickers pronouncing ‘I signed my Speed Limit Promise’ and driver speeds being reported in the school newsletter.




Aim





To reduce the number of drivers speeding in 40km/hr school zones and improve understanding among drivers that their vehicle speed affects pedestrian and cyclist comfort, safety and the decision to walk or cycle to school.

Method

In response to ongoing safety concerns the City of Melville worked with local primary schools to develop the Silhouette Children that encourages drivers to obey the 40km/hr school zone speed limit through intrigue. It also reminds drivers that their vehicle speed is responsible for student safety and the decision for others to walk or cycle.

The Silhouette Children includes a combination of initiatives that are visible while driving past the school (Phase I) as well as 'behind the scene' initiatives that encourage parents to take responsibility for their children's safety through compliance with the 40 km/hr school zone (Phase II). A brief description of the Silhouette Children is tabled below:

Timeline	Intervention	Picture
1 week (30 April – 4 May 2007)	No intervention Baseline survey only	
2 days (7 & 8 May 2007)	Silhouettes Only Large brightly coloured 'silhouettes' holding 'Go Slow for Us' signage mounted along the road in front of the school	
1 day (9 May 2007)	Silhouettes & Student Speed Testing to help drivers link their speeding with student safety and not revenue raising.	

<p>2 days (10 & 11 May 2007)</p>	<p>Speed Display Trailer Displays vehicle speed & messages to 'Slow' or 'Thank You'. One Silhouette at each end of school along roadside.</p>	
<p>1 month (14 May – 11 June 2007)</p>	<p>Speed Limit Promises, Car bumper stickers, (no visible roadside intervention) Children encourage parents to sign Speed Promises & 'I signed my Speed Limit Promise' car stickers are put on cars.</p>	
<p>2 days (11 & 12 June 2007)</p>	<p>Reminder Silhouettes 'Thank You for driving Safely'</p>	
<p>Continuing (occasional Reminder Silhouettes)</p>	<p>Newsletter & prizes Driver speeds reported in school newsletter & family movie pass prizes for people walking, cycling or using cars with a bumper sticker.</p>	

Silhouette Children **Phase I** - shaded green & **Phase II** - shaded yellow

Results for the 'Silhouette Children' (one week) program – Phase I

Vehicle speeds and vehicle numbers were collected using traffic classifiers on Marmion Street, a district distributor road adjacent to the school, before and during the Silhouette Children program from 8am to 9am each day.

The number of drivers speeding was reduced by almost half from 53% to 28% during the first week of the Silhouette Children due to the visible silhouettes, student speed check and the speed display trailer.

Anecdotal evidence from the Traffic Warden, Principal, parents and residents supported these findings and acknowledged the effect of the Silhouette Children on reducing driver speeds. 'Drivers showed a real interest in the Silhouette Children and supported the rationale for them.' Melville Primary School Principal.

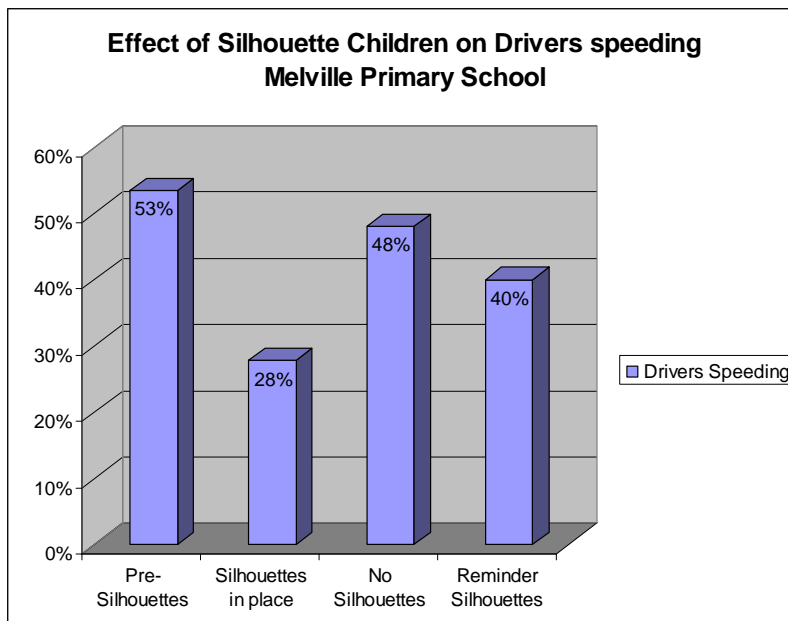
Results for the 'Silhouette Children' – Phase II

Phase II of the Silhouette Children was to determine if longer term improvements could be made to driver behaviour with no visible Silhouette Children on display.

This involved parents signing 'Speed Limit Promises' and applying stickers to their car pronouncing 'I signed my Speed Limit Promise'.

Marmion Street is a District Distributor B class road and Melville Primary School parents represent only 10 – 20% of vehicles on the road. However through the intervention of the Speed Promises and stickers enough parents appeared to be travelling at the legal speed limit and forcing other drivers behind them to also comply with the speed limit.

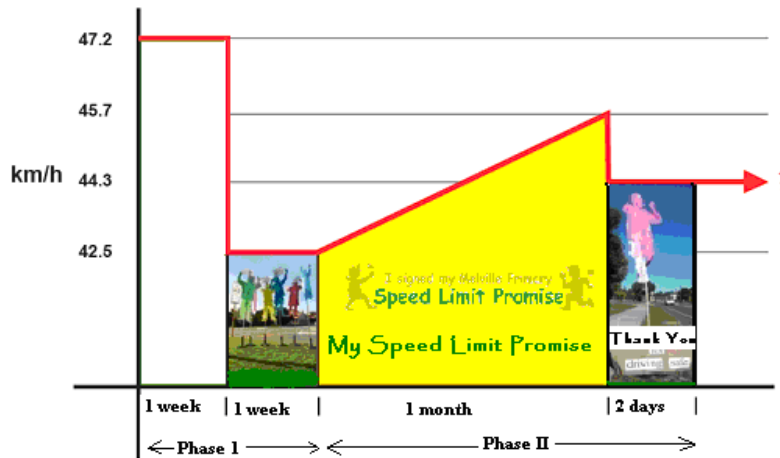
The chart below shows the reductions in drivers speeding over the course of the Silhouette Children Program, Phases I and II:



Reduction in drivers speeding throughout Phases I & II of the Silhouette Children

Similar results are evident when 85th percentile speeds were monitored against time, see below:

Driver Speeds Phases I & II



Effect of the Silhouette Children program on 85th percentile speeds over Phases I & II

Conclusion

The Silhouette Children resulted in a clear and substantial increase in the number of drivers complying with the 40 km/hr school zone speed limit on Marmion Street. The increase in driver compliance was most pronounced while the Silhouette Children were visibly displayed, ie Phase I.

During phase II of the Silhouette Children when no silhouettes were in place (ie: no visible changes to the road environment) driver behaviour was still significantly better than before the Silhouette Children. This was most likely due to enough parents agreeing to obey the speed limit after signing their Speed Limit Promises and displaying the car bumper stickers.

In addition drivers responded positively to 'Reminder' silhouettes that were in place for two days at the end of this program prompting a drop in vehicle speeds against the gradually rising trend.

Improved driver behaviour could be expected by using regular 'Reminder Silhouettes', continuing to display driver speed results in the school newsletter and local newspaper and continuing to provide prizes at assembly for drivers displaying the bumper sticker.

Acknowledgements:

Integral to the success of the Silhouette Children include the support of Melville Primary School, parents, students and neighbours as well as the City of Melville for its commitment to solving issues through behaviour change initiatives.

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