## **Road Safety Benefits**





TravelSMART Households in the West delivered a range of benefits to the community, including demonstrable road safety benefits. This document outlines the evidence indicating the reduction in road crashes associated with the reduction of vehicle kilometres travelled.

TravelSMART Households in the West, was delivered to 65,000 households in Adelaide's western suburbs. This project influenced individual household travel behaviour using two approaches: one-on-one (knocking on their door or calling them at home), and engaging them via trusted groups. Independently measured, this project achieved outstanding results. The project achieved reductions in car travel from participants by 10.4km per day or 18%, whilst non- participants increasing car travel by 6%.

See <u>www.sa.gov.au/travelsmart</u> for further details about the project results.

Table 1 presents the number of crashes in the three years prior to and three years after the implementation of the THITW program. As can be seen from the table, the number of crashes reduced by a greater percentage for residents of the THITW area than for residents of the rest of metropolitan Adelaide (8.5% vs 4.4%). A chisquare test for independence was significant ( $\chi^2 = 9.59$ , df = 1, p = 0.002), suggesting that the decline in THITW area was independent of the decline for the rest of metropolitan Adelaide.

An estimate of the number and economic benefit of crashes avoided due to the THITW program can be made by assuming that without the program, the number of crashes by residents of the THITW area would have declined by the same amount as the rest of metropolitan Adelaide, namely 4.4%. This would have meant there would have been 11,847 crashes between 2006 and 2008 rather than the 11,342 crashes that actually occurred, suggesting a saving of 505 crashes over three years. Calculations of the economic benefit of this are presented in Table 2. As can be seen from the table, it is estimated that the economic benefit due to the additional reductions in road crashes between 2006 and 2008 for residents of THITW suburbs is approximately \$19 million.

Table 1 Number of crashes prior to and post implementation of THITW

	Pre intervention	Post intervention	% Change
	2002-2004	2006-2008	
THITW post code areas <sup>1</sup>	12, 393	11, 342	- 8.5%
Rest of Metro Adelaide	72, 439	69, 241	- 4.4%

**Further information** 



Transport and Infrastructure

<sup>&</sup>lt;sup>1</sup> 5008-5016, 5019-5025, 5044, 5045

Table 2 Savings in road crash costs due to THITW

	% of all crashes <sup>2</sup>	Crashes avoided due to THITW	Per unit cost of crash – 2008 dollars <sup>3</sup>	Savings due to crash reduction
Fatal	0.34	1.7	\$2, 271, 214	\$3, 861, 064
Serious Injury	3.42	17.3	\$560, 578	\$9, 697, 999
Minor Injury	28.52	144.0	\$18, 928	\$2, 725, 632
Property Damage Only	67.72	342.0	\$7, 980	\$2, 729, 160
Total	100.0	505		\$19, 013, 855

It is also interesting to examine whether THITW suburbs with greater participation rates also saw a greater reduction in road crashes. The number of crashes in the three years prior to and after implementation of the THITW program for postcode areas with greater than 30% participation is presented in Table 3. As can be seen from the table, the higher participation suburbs saw a 10.2% decline, compared to an 8.5% decline for all of the THITW suburbs. A chi-square test for independence again was significant ( $\chi^2 = 7.76$ , df = 1, p = 0.005), suggesting that the change for residents of the high participation suburbs was independent of the change for residents of the rest of metropolitan Adelaide not involved in the program.

Table 3 Number of crashes prior to and post implementation of THITW for residents of suburbs with >30% participation

	Pre intervention 2002-2004	Post intervention 2006-2008	% Change
THITW postcodes with > 30% participation <sup>4</sup>	4503	4045	-10.2%
Rest of Metropolitan  Adelaide (excluding all  THITW postcodes)	72439	69241	-4.4%

<sup>4</sup> 5011, 5014, 5019, 5020, 5021, 5022, 5025



<sup>&</sup>lt;sup>2</sup> Based on the distribution of crashes across severity for the whole of metropolitan Adelaide between 2002 and 2008.

<sup>&</sup>lt;sup>3</sup> From knet #3449543 based on Bureau of Transport Economics 'Road Crash Costs in Australia'