

TravelSmart and LivingSmart Case Study – Western Australia **Department for Planning and Infrastructure**

SUMMARY

TravelSmart is a state government program that promotes alternative transport options, by correcting information failures at an individual and household level. It also supports cross-sectoral leadership by helping the business community, institutions (such as universities and hospitals), schools and local governments reduce the car dependence of their staff and customers by overcoming infrastructure and information barriers.

PROJECT OVERVIEW

By working directly with individuals at a household level and with stakeholders that can influence travel behaviour in the community, TravelSmart contributes to the establishment of new social norms and a more robust community that is better able to use travel alternatives to the car. The social and political value of assisting the community to access alternatives to the car is most relevant to the emerging market forces associated with the decline from peak oil and the necessary policy responses (carbon pricing) being developed to tackle climate change.

BACKGROUND

The Stern Review recognises that one of the three main policy responses to climate change involves removing barriers. This includes "...action to remove barriers to energy efficiency, and to inform, educate and persuade individuals about what they can do to respond to climate change" (Stern 2006, viii). Stern concludes that "Dangerous climate change cannot be avoided solely through high level international agreements; it will take behavioural change by individuals and communities, particularly in relation to their housing, transport and food consumption decisions" (Stern 2006, 395). The Stern Review also recognises that governments, businesses and individuals can all help to promote action through demonstrating leadership.

In-depth interviewing of 820 residents in Perth, Western Australia, revealed that accessible and time competitive alternatives exist for around half of all car trips currently made (Socialdata Australia 2000). Of this 'potential for change' a lack of information and awareness (e.g. 'which bus?') prevents residents from taking up these available alternatives for 17 per cent of trips. Misperceptions (e.g. 'the bus is really slow') prevent another 7 per cent of trips from being changed. This information failure theoretically prevents 24 per cent of all trips from being switched from the car. When the TravelSmart intervention is applied community-wide, these theoretical potentials for change translate into a rapid reduction of around six per cent in car-as-driver trips as a proportion of all trips (a relative reduction of 10 per cent).

TravelSmart establishes a dialogue with each household in the suburbs in which it is delivered. Depending on the response to an initial contact, households are taken through a process that informs and motivates them to replace car trips with

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walking, cycling and public transport trips. The process is delivered over a two month period and works by:

- addressing information barriers by localising and simplifying information to make it relevant to people's needs;
- providing motivation through dialogue and personalised communication; and
- assisting with system experience particularly for new users of public transport.

TravelSmart empowers people by providing advice and encouragement relevant to their unique situation and then leaves the choices up to them. It does not tell people to get rid of their car or to reduce their mobility around the city. It encourages people to consider their travel choices and to try an alternative to the car for one or two trips a week.

The TravelSmart program in Perth has been delivered to a target population of 418,500 residents over 26 local areas (groups of suburbs) since 2000. TravelSmart changes are immediate and are achieved at a fraction of the cost of land use and public transport improvements.

The project has been highly successful in Perth because the urban form is characterised by low-density suburban living that is highly car dependent (as measured by 80 per cent of personal trips being made by car as driver or passenger and only 20 per cent by walking, bicycle or public transport). This high level of car dependence leads to a strong habitual response to car use and a low level of awareness of realistic alternatives for many trips. The public transport system, and the opportunities for walking and cycling, is better than the perception that the vast majority of the population has of it.

The in-depth approach reveals this knowledge gap only when the survey respondent's trip-making is physically checked against other travel modes, thereby measuring the difference between what an individual perceives as the alternative modes of transport available and what is actually available on the ground (eg. was a bus service or other option available for each car trip).

The research demonstrates that knowledge and experience (which can be affected by motivation) are far more powerful than attitude. Dialogue based marketing approaches work because they overcome these simple information barriers to unlock some of the large potential for behaviour change.

The TravelSmart program, first trialled in Western Australia 10 years ago, has now been adopted by almost all jurisdictions in Australia and has addressed the two themes of consumer information failure and cross-sectoral leadership, through a number of pilot and demonstration projects (AGO 2006). The jurisdictions are at different stages of program development and vary with their focus on individual and leadership programs.

Over the past six years, the Commonwealth Government has provided coordination and funding support for many of these pilot and demonstration projects. The National Travel Demand Management (TDM) Network, co-ordinated by the

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Commonwealth, has commenced development of a National Collaborative Framework to progress TDM. The Environmental Protection and Heritage Council (EPHC) has endorsed the development of this collaborative framework. It is also anticipated that the role of behaviour change programs will be addressed in a new National Transport Policy Framework that the Australian Transport Council (ATC) has agreed to develop.

OPPORTUNITIES AND BENEFITS

Detailed evaluation of eight projects shows the Western Australia TravelSmart program has achieved an average 10 per cent reduction in car trips and 13 per cent reduction in car kilometres across the suburbs in which it was delivered. This is an average of 69 less car trips per person per year. The reductions in car trips have largely been transferred to more walking, bicycle and public transport trips.

Community benefits (based upon the combined results of eight projects reported to date) are projected, for the full program of 418,500 residents, to be an annual reduction of 30 million car trips, 290 million car kilometres and abating 88,000 tonnes of greenhouse gases. Other community benefits include increased public transport fare revenues, reduced local pollution, increased physical activity (from more walking and cycling), improved social well-being (people on the streets) and increased security (eyes on the street).

Figure 1 TravelSmart changes in main mode by trip distance

Total			Trip distance									
			Up to 1 km		1.1 to 3.0 km		3.1 to 5.0 km		5.1 to 10.0 km		10.1 km +	
With out IM*	with IM	Trips per person per year	With out IM	with IM	With out IM	with IM	w/out IM	with IM	w/out IM	with IM	w/out IM	with IM
131	165	Walking	91	117	35	42	4	5	1	1	-	1
23	35	Bicycle	6	7	8	14	4	6	3	5	2	3
4	4	Motorbike	0	0	0	1	1	1	2	1	1	1
706	637	Car as driver	72	63	153	140	127	112	169	153	185	169
273	276	Car as passenger	34	29	65	67	55	57	67	65	53	58
59	68	Public transport	3	2	7	10	11	14	15	20	23	22
1196	1185	Total	205	218	268	274	202	195	257	244	264	254
213	268	Environment Friendly Modes#	100	126	50	66	19	25	19	26	25	26

#walking, bicycle, public transport. *IM = Individualised Marketing (TravelSmart)
Source: Department for Planning and Infrastructure WA - combined dataset of 8 projects

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CONSTRAINTS AND COSTS

Tracking of travel behaviours in South Perth (the first large scale demonstration project) have confirmed that the vast majority of the reduction in car use has been sustained for more than four years. Similar tracking of public transport ticketing data has shown no loss of the patronage increases achieved in Cambridge (the second large scale project in Perth) over a period of more than four years.

The large changes in travel behaviour provide financial and socio-economic returns sufficient to justify the program on the basis of travel behaviour changes sustained for as little as two years. For every 28,000 people the TravelSmart program is delivered to, the State invests \$1 million. When the full range of community benefits are taken into account (including car operating costs, traffic congestion and road maintenance, pollution and health benefits), it returns more than \$30 for every \$1 invested (over 10 years) (Ker 2002).

From a greenhouse gas abatement perspective the TravelSmart program in Perth delivers a reduction of 750 kilometres per target person per annum. This approximates to 225 kg of CO₂-e (full fuel cycle) of abatement per target person. Each \$1 million in project investment (with 28,000 target persons) delivers 6,300 tonnes of greenhouse gas abatement per annum. The first year cost is \$159 per tonne of abatement. Based on an 80 per cent durability of behaviour changes over five years, and no behavioural maintenance costs, the abatement cost falls to \$40 per tonne over five years. The 10-year cost (not yet tested by ongoing evaluations) may be around \$20 to \$30 per tonne. Factoring in the fuel cost savings to the community or the public transport fare revenue take for the government and public transport provider would produce a net negative community cost per tonne of abatement.

Dialogue marketing techniques are able to be delivered at reasonable cost (approximately \$200 per household) to communities upwards of 10,000 households. The realistic reach, constrained by making reasonable efforts to contact households, is around 80 per cent of urban and regional centre populations.

PROGRESS AND FUTURE PLANNING

As of the end of 2007 TravelSmart projects have been completed across a range of inner, middle and outer suburbs in Perth with a total population of 418,500. These suburbs stretch from Clarkson in the north to Rockingham in the south and include a range of urban typologies and socio-demographics.

Following on from a successful large-scale TravelSmart demonstration project in the City of South Perth in 2000, the TravelSmart methodology (dialogue marketing) has been widely used to address the demand for travel in developed cities around the world, including Europe, England and North America. Projects have been delivered to more than two million people and several specialist dialogue marketing contractors have emerged. Elsewhere in Australia, projects have been delivered in Queensland, South Australia, Victoria and the ACT.

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The success of the WA TravelSmart Household program has also led to its expansion beyond transport to incorporate other consumer behaviours through a Living Smart energy demonstration program scheduled to be delivered to 15,000 households during 2008. The Living Smart program is part of the Premier's Action Statement on Climate Change (Gov WA 2007) in Western Australia and addresses household approaches to energy, water, waste and travel use.

Two communications packages are being tested in the demonstration project to compare household engagement in one 'topic' at a time (energy, water, travel or waste) with engagement in a progressive 'package' of actions across all topics. The 'package' design introduces simple behavioural and low cost technologies first, moving on over the 12 months to offer advice on more difficult behaviours and home improvement investments.

The potential abatement outcomes from Living Smart are up to four times greater than that of TravelSmart because the potential for home energy efficiency improvements is so great – the typical household can abate 1.5 tonnes of CO₂-e by simply changing to energy efficient lighting and standby settings (SMEC 2008).

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