



NEXT STEPS

Safer Routes to School

The Dublin Transportation Office would like to thank the following for their assistance in producing this report:

Breda Noonan	Dublin City Council
Donal Matthews	Dublin City Council
Eithne Gibbons	Dublin City Council
Michael Byrne	Dublin City Council
Dominic Gillan	Bray Urban District Council
Eamon Sayers	National Safety Council
Paul Cantwell	Fingal County Council
Seamus Kelly	Fingal County Council
Gerry Halton	Kildare County Council
Michael John	Green Schools
Jane Helps	Green Schools
Muiris O'Keefe	South Dublin County Council
Marie McCallion	Physical Activity Development Co-ordinator, North Western Health Board
Gillian Weyman	Formerly of Northshore City Council, New Zealand
Marion Allen	Laytown School Parents Association
Joan O'Mara	Donabate National School Parents Association
Colin Buchanans and Partners	
Faber Maunsell	

The help of the staff, pupils and parents of the following schools is also appreciated:

Donabate Girls National School
St. Patrick's National School, Donabate
Malahide Community School
St. Cronan's National School, Bray
St. Vincent de Paul Junior and Senior Girls School, Griffith Avenue
Scoil Mhuire Boys National School, Griffith Avenue
Ard Scoil Ris Boys Secondary School, Griffith Avenue

Project co-ordinator and report author:

Finola O'Driscoll, Transportation Planner, Dublin Transportation Office

Report Status:

This report was presented to the Dublin Transportation Office Steering Committee on 17th May 2005 and approved for publication and submission to the Department of Transport.

*The logo on the front cover was created by **Eavan O'Sullivan** of Colin Buchanan & Partners, Ireland*

Safer Routes to School The Next Steps

1	SUMMARY	1
2	TRENDS IN SCHOOL TRAVEL.....	3
2.1	Headline Figures	3
2.2	Reasons why pupils are driven to school	4
2.3	Safety	4
2.4	Convenience	4
2.5	Distance	5
2.6	Time Taken	6
2.7	Change Desired	6
2.8	Main Findings of the DTO survey	6
3	THE CONSEQUENCES	7
3.1	Health Impacts	7
3.1.1	<i>Obesity</i>	7
3.1.2	<i>Pollution</i>	7
3.2	Congestion	7
3.3	The Future of Walking and Cycling	8
3.4	Social Development	8
3.5	Quality of Local Environments.....	8
4	THE DTO SAFER ROUTES TO SCHOOL PILOT SCHEMES	9
4.1	General Outcome of the Pilot Schemes	10
4.2	Measures Resulting from the Pilots.....	10
4.2.1	<i>Walking Bus</i>	10
4.2.2	<i>Cycle Skills Training</i>	11
4.2.3	<i>Cycle Parking Provision</i>	11
4.2.4	<i>Cycling and Walking Promotion</i>	11
4.2.5	<i>Bus Promotion</i>	11
4.2.6	<i>Car Sharing Database</i>	11
4.2.7	<i>Improved Front of School Environment</i>	12
4.2.8	<i>Physical Works</i>	12
5	THE RESULTS OF THE PILOT SCHEMES	13
5.1	Donabate National Schools.....	13
5.2	St. Cronan's, Bray	13
5.3	Griffith Avenue.....	14
5.4	Malahide.....	15
5.5	Lucan.....	15
5.6	Shankill.....	15

5.7	Schemes outside the Pilot Programme	16
6	CRITICAL SUCCESS FACTORS	17
6.1	Enthusiastic Involvement.....	18
6.2	Champions and Key Supporting Personnel	18
6.3	Working Groups	18
6.4	Partnership and Technical Support.....	19
6.5	Parental Involvement.....	19
6.6	Pupil Support.....	20
6.7	On-going Support	20
7	INTERNATIONAL EXPERIENCE	21
7.1	The UK <i>Safer Routes to School</i> Model	21
7.1.1	<i>Operation</i>	21
7.1.2	<i>Funding</i>	22
7.1.3	<i>Effectiveness</i>	22
7.2	Canadian <i>Safer Routes to School</i> Model	23
7.2.1	<i>Funding</i> :.....	23
7.2.2	<i>Effectiveness</i>	24
7.3	Northern Irish SRTS pilot programme	24
7.3.1	<i>Operation</i>	24
7.4	New Zealand Pilot Programme	24
7.5	Commonalities in International Experience	25
8	THE GREEN-SCHOOLS MODEL	25
8.1	Operation.....	25
8.1.1	<i>Success</i>	26
8.1.2	<i>Effectiveness</i>	27
8.1.3	<i>Links with Transport</i>	27
8.2	Potential for Integrating <i>Safe Routes to School</i> and Green-Schools programmes	27
9	NEXT STEPS.....	28
9.1	Proposed Irish SRTS Structure	29
9.2	Proposed Operation	30
9.3	Actions Required	31

Safer Routes to School

The Next Steps

1 SUMMARY

In 1991, 24% of Irish school pupils were driven to school; by 1996 this had increased to 30%, reaching 42% by 2002. In 2002, school related trips accounted for over 20% of the total number of cars on the roads in the Greater Dublin Area during the morning peak period. This is indicative of a growing trend in the use of the car for the school journey. Over the same period the numbers cycling and walking to school dropped by 17%. These trends are particularly evident in urban areas. Almost half of all primary school children in the Greater Dublin Area (GDA), which comprises the counties Dublin, Wicklow, Kildare and Meath, are now driven to school.

The emergence of a car dependant generation also jeopardises the future viability of walking, cycling and public transport as transportation modes. Aside from the transport implications, the increased use of the car for school journeys has consequences for children's overall health, in terms of increased obesity levels, exposure to pollution and impeding social development.

Most pupils live within walking and cycling distance of their school. Therefore, significant opportunities to redress the trend of car use for the school journey exist and should be pursued. However, the dominant concerns of parents when they decide how their children travel to school are safety and security and these must be addressed in developing *Safer Routes to School* initiatives.

Schemes, under the general heading of *Safer Routes to School (SRTS)*, have been established in the UK, Canada, and Australia and throughout Europe to encourage parents and children to walk, cycle or take the bus to school. Recent research from the UK has shown that these schemes are effective and can reduce car traffic to schools by 8-15%.

In order to explore the opportunities and challenges of developing a similar Irish initiative, in 2000 the DTO secured funding of £2m (€2.54m), under the National Development Plan, to establish some pilot Safer Routes to School projects.

An interdepartmental working group selected six pilot schemes, which were focused on four objectives:

- To achieve a modal shift away from the car.
- To reducing the number of school based accidents
- To provide an front of school environment focused on the pupil, not traffic
- To improve the levels of fitness amongst students by promoting more active travel patterns.

The total cost of the pilot schemes was €1.66m. The pilots, by their nature, were a learning process for everyone involved. An initial focus on providing pedestrian and cycling infrastructure proved to be both expensive and premature, as provision of infrastructure in isolation was found to be insufficient to generate a modal change. It was only when attention moved to assisting school communities (pupils, staff, and parents) to develop management measures, such as walking buses, car sharing and car drop-off management, cycle promotion, bus promotion that any real changes in school travel patterns began to occur.

Safer Routes to School schemes cannot be imposed on a school community. The pilot programme showed that successful schemes must be managed at the local level, and are usually driven by the enthusiasm of a small group of people, supported by the authorities, such as the local authority and the Gardai.

Securing commitment to behavioural change from school staff, pupils and parents was a complex task and not all of the schemes were successful. However a number of innovative and encouraging initiatives emerged from the pilots and successful schemes have shown that modal change can be achieved. For example one school achieved a 22% reduction in the number of children being driven to school.

The key recommendation arising from this report is that a *Safer Routes to School* programme should be pursued as it has potential to address significant transport, health, environmental and social issues. The pilot projects have achieved their purpose, in that valuable experience has been gained regarding the factors critical to developing successful *Safer Routes to School* schemes in an Irish context.

A structure for a national *Safer Routes to School* programme is recommended; this is based on the experience of successful schemes, combined with a review of international experience. The opportunity for the programme to be incorporated into an established structure, that of the Green-Schools programme is also outlined.

A Safer Routes to School programme will require support from the Department of Transport; the Department of Health and Children; the Department of Education and Science; the Department of Environment, Heritage and Local Government, and the Department of Justice.

2 TRENDS IN SCHOOL TRAVEL

2.1 Headline Figures

The pattern of travel to and from school has changed dramatically in recent years. An examination of census figures shows that in 1991, 196,800 (24%) of Irish school pupils were driven to school. This increased to 239,500 (30%) in 1996 and by 2002, 309,340 (42%) of pupils were driven to school. This increase in car usage has been matched by a decline in those cycling or walking from 376,887 (46%) in 1991 to 211,073 (29%) in 2002. It is worth noting that the trend in distance travelled to school has not increased in this period.

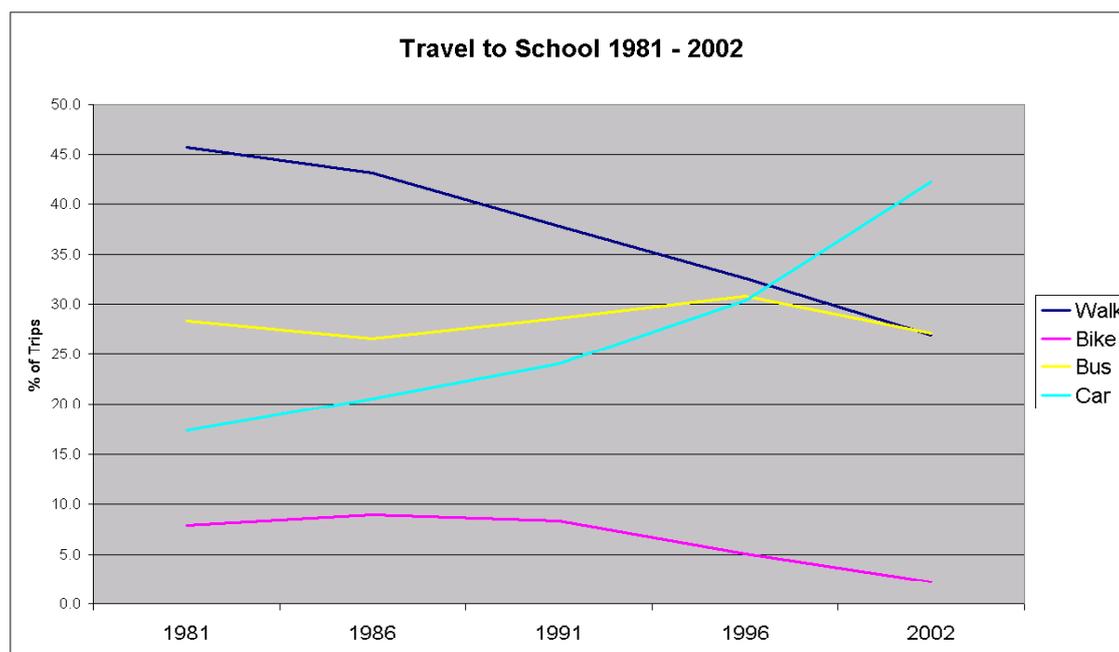


Figure 1 National Trends in the Mode of Travel to School 1981-2002. Source Census 2002

The rate of car use for the journey to school is growing, particularly in urban areas. 37% of all school pupils in the country attend schools within the Greater Dublin Area (GDA), which comprises the counties Dublin, Wicklow, Kildare and Meath. According to the 2002 Census, almost half of all primary school children in the GDA were driven to school, while the percentage walking or cycling dropped by 12% in the years 1996-2002.

Travel to School in the Greater Dublin Area					
Primary School			Secondary School		
Mode	% 1996	% 2002	Mode	% 1996	% 2002
Car	32	47	Car	17	22
Walk	48	39	Walk	39	37
Bike	2	1	Bike	9	6
Bus	17	12	Bus	32	30
Train	0	0	Train	3	3

Table 1: Mode of Travel to Primary and Secondary School in the Greater Dublin Area 1996-2002 (Source Census 2002.)

Reasons why pupils are driven to school

The Census does not contain information on the reasons for this trend in school travel. However in 2002, the DTO conducted an extensive GDA wide survey of school travel patterns. All primary and secondary school pupils in the area were surveyed. A total of 123,117 completed survey forms were received, representing a very robust response rate of 46%. The survey was completed by the parents of primary school children and by secondary school pupils. The main reasons for using different modes of transport for primary and secondary school journeys revealed by the survey are illustrated below.

PRIMARY SCHOOL

Reasons for Driving		Reasons for not walking and cycling	Walk	Cycle
Convenience	36%	Too Far	32%	23%
Safety reasons	35%	Too Dangerous	23%	43%
Quickest Mode	27%	Too Young	16%	17%

SECONDARY SCHOOL

Reasons for Driving		Reasons for not walking and cycling	Walk	Cycle
Quickest Mode	56%	Too Far	66%	31%
Convenience	33%	Too Much to Carry	13%	24%
		Prefer to Walk	-	12%
		Weather Conditions	8%	6%

2.3 Safety

Parents cited concerns about safety as a major reason why they drove their primary school children to school, rather than allowing them to walk or cycling. Secondary school pupils did not consider safety a major issue, however it may be a prime reason as to why their parents drive them to school.

2.4 Convenience

Convenience was also cited as a major reason why parents drive their children to school. If convenience can mainly be attributed to parents linking the school run with a car trip they would be doing anyway, the DTO survey showed that:

- **16%** of primary school children and **43%** of secondary school children, who were driven to school, are not driven home.
- **35%** of parents who drove their children to primary school continued on to work, and **41%** returned directly home.
- **51%** of parents who drove their children to secondary school continued on to work and **36%** returned directly home.

2.5 Distance

Distance was also cited as a major barrier to walking or cycling to school.

According to the Census:

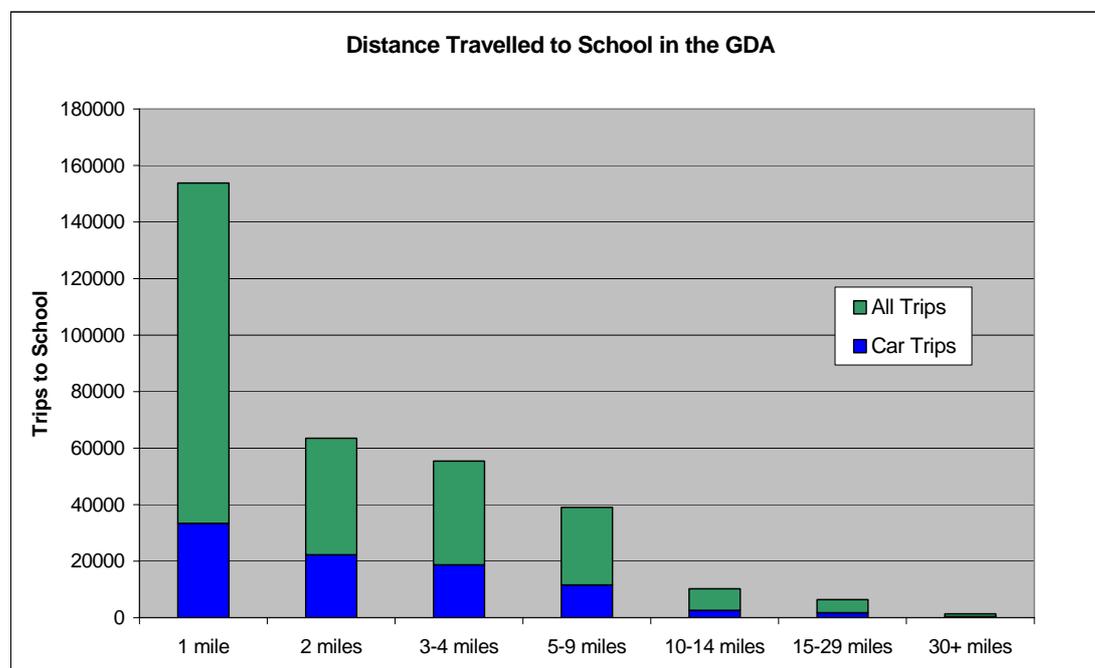
Nationally:

- 274,000 (37%) of all trips to school are 1 mile or less, and 391,000 (52%) of all trips to school are 2 miles or less.
- Of the 306,650 trips to school made by car, 106,000 (36%) a 1 mile or less, mile and 177,500 (58%) are 2 miles or less.

In the Greater Dublin Area:

- 117,500 (43%) of all trips to school are 1 mile or less, and over 159,200 (58%) of all trips to school are 2 miles or less,
- 102,800 (64%) of primary and 56,400 (49%) of secondary school pupils travel under 2 miles from their home to school.
- Of the 94,700 trips to school made by car, 33,500 (35%) are 1 mile or less and 55,700 (58%) are 2 miles or less.

Figure 2 Distance Travelled to School by All modes and by Car in the GDA - source Census



2002

Year	Distance Travelled to School in GDA 1996-2002							
	Total	Less than 1 mile	1 mile	2 miles	3-4 miles	5-9 miles	10+ miles	Not stated
1996	308947	21784	128854	39931	35040	25838	11327	46173
		7%	42%	13%	11%	8%	4%	15%
2002	275348	4332	113257	41636	37092	27841	13577	37612
		2%	41%	15%	13%	10%	5%	14%

Table 2: Change in distance travelled to School in Dublin County (source Census)

2.6 Time Taken

Table 3 shows that in Dublin at least, over short distances, the time taken to drive to school is comparable to that taken to walk, cycle or to take the bus to school.

Mode to School	Time Taken (Mins)	
	Under 1 mile	Under 2 miles
Car	10	16
Bus	15	17
Walk	12	22
Cycle	12	16

Table 3: Time Taken to Travel to School in Dublin County for distances of under 1 and 2 miles (source DTO survey 2002)

Change Desired

The DTO survey indicated that 73% of parents of primary school children consider it important that their children take more exercise by walking or cycling to school, while 70% of secondary school children consider it important to take more exercise by walking or cycling to school.

2.8 Main Findings of the DTO survey

Analysis of the main reasons why parents drive their children to school shows that on the basis of distance, convenience and time, there exists significant opportunity to redress the trend of car use for the school journey. This is accompanied by a desire on the part of parents and pupils to increase pupils' exercise by walking or cycling to school. However, realising this potential requires tackling the perceived advantages of the car and at the same time addressing the safety and security fears, either actual or perceived, which predominate as parents consider the alternatives.

3 THE CONSEQUENCES

The increased use of the car for school journeys has consequences for the health and social development of children, congestion, the quality of local environments, and the future viability of walking, cycling and public transport.

3.1 Health Impacts

3.1.1 Obesity

Obesity in children has recently been highlighted as an emerging public health problem. One in five Irish children are overweight, one in twenty are obese and less than half of teenagers aged 15-17 years take part in regular physical activity¹. Overweight children are twice as likely to become an obese adult, with the consequent risk of cardiovascular disease, diabetes and other disorders.

In order to protect against unhealthy weight gain, the Department of Health and Children recommends ongoing and regular physical activity, rather than temporary bouts of activity such as exercise programmes². The school journey is ideally placed to achieve the daily-recommended exercise quota and to combat the trend in childhood obesity.³

3.1.2 Pollution

According to the EPA, "emissions from road traffic are now the primary threat to the quality of air in Ireland"⁴. Children are more at risk than adults to pollution, having "substantially heavier exposures on a per weight basis to any toxins that are present in water, food or air"⁵. It is worth noting that children who are driven to school are especially at risk as, in slow moving traffic, passengers inside the car face pollution levels two to three times higher than pedestrians⁶.

3.2 Congestion

In the GDA, car traffic volumes more than doubled between 1991 and 2002, giving rise to increased congestion. Trips to work, school and college make up over 90% of all trips during the morning peak hour in the Greater Dublin Area. Given that there are over 265,000 primary and secondary places, 60,000 college places, and over 740,000 places of employment in the GDA, and that 37% of school trips are made by car, it can be clearly seen that school travel plays a large role in the trend of increased congestion.

While an increasing amount of car drivers are combining their trip to work with a school drop-off, a larger number are making a drop-off and travelling back home, the DTO survey shows that overall school/college related trips account for over 20% of all cars movements during the morning peak hour in the GDA region.

¹ Data from Department of Health Website, based on 2003 Slán Surveys

² Department of Health Website

³ Research has shown that for primary children, calories burnt in two hours of travel exceed those burnt in two hours of PE per week, the recommended requirement for pupils. Older children, who normally travel further to school, burn a third more calories on the school journey than they do in PE if they walk, but only half of the PE total if they go by car³.

⁴ Ireland's Environment 2004 EPA

⁵ *ibid* p.269

⁶ Comparative Pollution Exposure of Road Users, Environmental Transport Association Trust, 1997

3.3 The Future of Walking and Cycling

The pattern of physical activity established in childhood is the key determination of adult behaviour.⁷ This relates particularly to cycling; research in the UK found that although most children own bikes, less than a quarter use them, resulting in what Dr Mayer Hillman, Senior Fellow Emeritus at the Policy Studies Institute terms “a *lost generation of cyclists*”⁸. As every public transport journey starts or finishes with a walk or a cycle, this pattern may also have an effect on Public Transport usage in the future.

3.4 Social Development

The trend in decreased walking and cycling has consequences on children’s development in terms of independence, community and environmental awareness⁹. The point is made by Dr. Hillman, “*though the outdoor environment contains within it experience, learning opportunities and stimuli that are crucial to children’s understanding of the real world, it is now out of bounds to them until they reach an increasingly advanced age in their childhood*”.

3.5 Quality of Local Environments

Accessible local services, pleasant safe environments and opportunities for community interaction are among the features of good neighbourhoods¹⁰. The pollution and congestion associated with increased school related car traffic, has damaged the environmental quality of neighbourhoods, increased traffic and parking in the vicinity of schools and has reduced the safety and comfort of those walking and cycling. The decline of walking and cycling to school reduces the opportunity of meeting others on the way or at the school gates and threatens a traditional method of creating community networks.

⁷ Kuhl and Cooper, 1992, “Physical Activity at 36 Years:Patterns and children predictors in a Longitudinal Study”, Journal of Epidemiology and Community Health, 46,pp.114-119

⁸ Hillman M, Adams J, Whitelegg J, as before

⁹ Hillman M, Adams J, Whitelegg J. 1991, One False Move...: A Study of Children’s Independent Mobility.

¹⁰ Barton, H, Grant M, Guise R, 2003, Shaping Neighborhoods – A Guide for Health, Sustainability and Vitality.

4 THE DTO SAFER ROUTES TO SCHOOL PILOT SCHEMES

Schemes, under the general heading of *Safer Routes to School (SRTS)* programmes, have been established in the UK, Canada, and Australia and throughout Europe to redress the trend in school travel. These projects aim to encourage parents and children to walk, cycle or take the bus to school. *Safer Routes to Schools* schemes are usually co-operative ventures between school staff and students, parents, and local communities and local authorities.

These schemes have proved effective at reducing car traffic¹¹. A recent national review of SRTS data in the UK concluding that where Local Authorities engage with schools, the overall reduction in car use to school is in the order of 8- 15%.¹²

In order to explore the opportunities and challenges of developing a similar Irish initiative, in 1999, the DTO assigned £2m (€2.54m), from the funding allocated to regional traffic management under the National Development Plan, to a number of pilot *Safer Routes to School* projects.

In 2000 the DTO convened an interdepartmental working group, consisting of representatives from the Departments of Transport, Health, Education and Environment, National Parents Council, public transport operators and Local Authorities to select and establish objectives for the pilot schemes and to oversee the implementation of the programme.

The agreed targets of the pilot schemes were:

- To improve safety by reducing the number of school based accidents by 50%;
- To provide a pupil-centred front-of-school environment.
- To improve the levels of fitness amongst students by promoting more active travel patterns and increased activity;
- To achieve a 20% reduction in the number of pupils driven to school, or at a minimum reduce the numbers driven to school in the morning to equal that driven home from school.

Six pilots schemes, involving 12 schools were selected on the basis of recommendations from the Local Authority Road Safety Officers.

The schemes were -

- Donabate (St. Patrick's Boys National School and Donabate Girls National School)
- Bray (St. Cronan's School – boys' primary school)
- Griffith Avenue (three primary schools and one secondary school)
- Malahide
- Lucan
- Shankill

Engineering/Transport Planning consultants were engaged to develop the schemes on behalf of the relevant Local Authority and the DTO.

¹¹ Hyllenius 2003 – School Travel Work in Lund has reduced car use by 24%,

Wilhiem 2003 – Projects in Belgium and Surry have typically reduced car use by 6-16%, but with reductions as high as 42%

¹² Cairns, Sloman, Newson, Anable, Kirkbride & Goodwin 2004 - Smarter Choices Changing the Way we Travel – Final Report to the Department for Transport UK.

4.1 General Outcome of the Pilot Schemes

The total cost of the pilot schemes was €1.66m, most of which was spent on physical infrastructure in the vicinity of the schools, including footpaths, traffic calming measures, pedestrian crossings and cycle lanes.

The pilots by their nature were a learning process for everyone involved. While the DTO was mindful of securing value for money, the initial focus on large packages of infrastructural measures was found to be both expensive and premature. It was only when attention moved to assisting school communities develop management measures, such as walking buses, cycle promotion, bus promotion, car sharing and car drop-off management, that any real changes in school travel patterns began to occur. Providing some physical infrastructure was found to be necessary in most cases, but this is most effective when it supports management measures.

Not all schemes progressed to the stage of developing management measures. The process of selection, whereby schools were chosen rather than chose to participate, was partly responsible for this. There was a feeling among a number of schools, that the schemes were being 'foisted' upon them. Even when schools were willing to participate it was a difficult task to secure the commitment necessary to implement behavioural change measures. A key ingredient for success is the involvement of the local community and local stakeholders including An Garda Síochána.

In this regard it is notable that the most successful schemes had a local "champion" or "champions" whose commitment and determination to succeed, rallied the whole community to the project. Despite the mixed results, a number of innovative and encouraging initiatives have emerged from the pilots and the successful schemes have shown that the targets can be achieved.

Overall the pilot projects have achieved their purpose and valuable experience has been gained regarding the factors critical to developing successful Safer Routes to School schemes in an Irish context.

4.2 Measures Resulting from the Pilots

4.2.1 Walking Bus

The walking bus is a group of primary school children who walk to and from school, supervised by adult volunteers, usually parents who walk with the bus on a rota basis. The route usually passes through residential areas collecting and dropping off the children at stops along the way. Parents wait with the children at the stops until the walking bus collects them. Both children and supervising parents wear reflective jackets to increase their safety and visibility and trolleys are provided for school bags.

The walking bus was a very tangible result of two of the *Safer Routes to School* pilot schemes, and had far reaching impacts. The visible impact of a large group of children walking to and from school, affects driver behaviour in a positive manner. In particular, it slows vehicle speeds along the route of the walking bus and makes it safer for everyone walking at that time. The interaction between those involved (both children and adults) and the trust and shared responsibility developed, makes the walking bus a very effective community-building tool. Volunteers have commented on the increased feelings of neighbourliness in the community that they attributed to the walking bus. It also serves to stimulate debate regarding school travel in the wider local community and becomes a promotional tool of *Safer Routes to School* scheme.

4.2.2 Cycle Skills Training

Cycle training was provided in two schemes, through modular programmes where children receive initial training in bike-handling skills in the schoolyard moving onto development of traffic awareness through on-road training. This is usually undertaken with pupils in 5th or 6th class.

4.2.3 Cycle Parking Provision

Cycle parking provision was provided as a practical facility for students in four of the pilot schemes. This represented a visible result of the projects and an environmental improvement to the schools. Experience in Northern Ireland found that the provision of cycle parking alone could activate a previously latent demand for cycling to school.¹³

4.2.4 Cycling and Walking Promotion

Cycling and walking were promoted in all schemes through a variety of media. Leaflets were distributed to parents, school newsletter and websites were utilised to deliver the message, and presentations by transport and health professionals were given to parents' associations, to staff and to pupils. Local and national media were also used to raise awareness.

4.2.5 Bus Promotion

Where schools were serviced by regular or dedicated bus services, bus promotion involved provision of maps and timetable information to parents and pupils and also placing the bus maps and timetables in prominent positions in the school. In cases where new or additional bus services were identified, maps illustrating the current catchment of school pupils were produced, in order to assist parents in discussions with bus operators.

Bus lay-bys and shelters were provided to increase the safety and comfort of children boarding and to increase the attractiveness of the bus. In the one scheme, the operational procedure of the school bus was altered, so that they departed from a different side of the road, in order to provide a safer front of school environment.

4.2.6 Car Sharing Database

The car is essential for some school trips, particularly for those who travel long distances or have special needs. A car-sharing database was established in one *Safer Routes to School* scheme to encourage a reduction in overall car travel. The database stored information on the travel needs, availability and contact details of interested parents and the school facilitated the matching of these to enable the school trips by car to be shared.

¹³ Northern Ireland School Travel Plans Pilot Study Cycle parking facilities were provided to each of the 9 schools involved in the pilot scheme. . Provision for 20 cycles was implemented at Parkhall Secondary School in Antrim. Before the installation approximately 3 to 5 pupils cycled to school. After installation the capacity has been exceeded and the school are now examining ways of funding additional shelters, this success has been the experience at all of the pilot schools.

4.2.7 Improved Front of School Environment

All of the schemes involved physical works to improve the area in front of the school, with a view to making it more pupil-orientated. Works included footpath build outs, raised platforms for pedestrian crossings, re - management of parking and providing bus bays. It was found that, aside from the physical works, awareness of the *Safer Routes to School* scheme assisted Gardai in enforcing traffic and parking regulations in the vicinity of the schools. The schemes also resulted in increased self-regulation, as parents felt more empowered to regulate the parking behaviour of other parents.

4.2.8 Physical Works

Other physical works associated with the schemes included provision of footpaths and cycle lanes and cycle tracks. Traffic management measures such as gateway treatments, speed ramps, traffic signals, and speed responsive warning signs, were also provided.

5 THE RESULTS OF THE PILOT SCHEMES

5.1 Donabate National Schools.

Two schools were involved in the Donabate scheme - St Patrick's Boys National School and Donabate National Girls School. The key issues and problems were the numbers of children being driven to and from school on a daily basis (65%), a dangerous front-of-school environment and a poor pedestrian and cycling approaches to the school.

COST: €612,411.

MEASURES:

- Development of two Walking Buses
- Improvements to Pedestrian Infrastructure
- Establishment of a Car Sharing Database Promotion of Bus Use and Improved School Bus Service
- Provision of Cycle Parking at both schools
- Improvement of area outside the school
- Establishment of a *Safer Routes to School* Working Group



The Donabate Walking Bus

RESULTS:

The results of the scheme showed a 22% reduction in car-use. The modal shift comprised an 11% increase in walking, half of which was directly attributed to the walking bus, an 8% increase in bus use and a 1% increase in cycling. Of the 43% travelling to school by car, approximately 7-8% are involved in the formal car-sharing scheme.

* * *

5.2 St. Cronan's, Bray

The *Safer Routes to School* scheme was developed for St. Cronan's School, a primary boys' school in Bray. The scheme focused on cycle promotion.

COST: €168,000

MEASURES:

- School entry treatment,
- Signalised junction,
- Cycle lanes
- Footpath build-out
- Parking management
- On road cycle training
- Cycle Promotion



Cycle Training at St Cronan's School, Bray

RESULTS:

- Cycling to the school increased from 0% in 1997 to 9% in 2001, although this had dropped back to 6% by 2004.
- Children coming to school by car decreased by 6% from 54% in 1997 to 49% in 2004.

* * *

5.3 Griffith Avenue

The Griffith Avenue scheme, which includes three primary school one secondary school, was completed in two phases. The initial phase was purely focused on physical measures and the second phase, initiated much later and still ongoing, was based on implementing management measures.

COST : €609,000.

MEASURES:

- Significant cycling and pedestrian infrastructure was provided
- A Walking Bus was established in January 2005 to service the primary schools. This Walking Bus currently operates two days a week, and hopes to build momentum
- A day of Health and Activity talks was held in the school to promote the scheme
- Cycle training and promotion is planned
- Increased parking regulation
- A resource pack of implementation measures is being developed



Cycling and Walking along Griffith Avenue

RESULTS:

The results of the scheme have yet to be quantified.

* * *

5.4 Malahide

COST: €219,000

MEASURES:

- Substantial physical works including cycle lanes and pedestrian crossings were provided in this scheme.
- Cycle Parking was provided.
- A working group was established and provided with information regarding bus, cycling and walking promotion initiatives and information on how to restructure the current parking arrangements so as to provide a great priority to pedestrians, cyclists and the buses.
- The school authorities also banned pupils from driving to school.

RESULTS:

The scheme resulted in a 2% (22 pupils) increase in cycling, a 1% (11 pupils) increase in walking. There was also a 4% (44) increase in those travelling to school by car, and a 3% decrease in bus use. The increase in cycling was most likely due to the promotional efforts of a committed teacher. It may be possible to build on this if improved cycle provision in the public park and at other key locations along the routes to school can be developed.

SAFER ROUTES TO SCHOOL

MALAHIDE COMMUNITY SCHOOL

WHAT IS MALAHIDE SAFER ROUTES TO SCHOOL ABOUT?

It's about Reducing Congestion and a Safer More Attractive Malahide.

It's about Healthier Students and a Healthier Environment.

It's about the School promoting Walking, Cycling or taking the Bus or Train.

It's about Innovation as the First Scheme of its Kind in the Country And...

It's about Action i.e. EVERYONE CAN PLAY A PART

In association with and supported by

Ita **FABER MAUNSELL**

Leaflet distributed to all Pupils in Malahide

* * *

5.5 Lucan

COST: €57,000

A report and preliminary designs were produced for this scheme. However, local resistance to the scheme, due to the introduction of parking control measures and a QBC in the area, prevented it going beyond these preliminaries.

* * *

5.6 Shankill

COST: €0.

This scheme did not commence.

* * *

5.7 Schemes outside the Pilot Programme

During the course of the pilots, the DTO has also assisted other schools that wished to develop their own *Safer Routes to School* initiatives. These schemes, together with the DTO pilot schemes, have expanded the Irish *Safer Routes to School* experience. The additional schemes included the establishment of two walking buses in Laytown/ Bettystown and the establishment of a walking bus in Sligo.



Walking Bus at Laytown/Bettystown



Walking Bus at St Edmunds National School in Sligo

Kildare County Council is also developing a town wide Safer Routes to School scheme incorporating five primary and three secondary schools in Naas. Travel patterns to the schools were mapped and used as the basis for workshop consultation exercises. Teachers, parents, the local Gardai and other interested members of the community were among those who participated. The well-attended workshops were very successful in raising awareness for the initiative. The results of the consultation exercise have been collated and the Council are planning to work with interested schools in preparing plans to promote walking and cycling to school.

6 CRITICAL SUCCESS FACTORS

There is no one solution that results in all school children walking, cycling or taking the bus to school. Directly challenging the car wins few converts, especially for hard-pressed parents trying to juggle the demands of parenthood and employment. The challenge is to reduce the real and understandable fear that parents have about the safety and security of their children if they allow their children to travel to and from school, while at the same time promoting the benefits of child development, health, community re-building and environmental improvement that these schemes can bring.

The pilot programme has demonstrated the need to have the full co-operation of the schools involved in *Safer Routes to School* schemes. Attempts to “impose” a scheme, inevitably will fail. With hindsight this appears obvious but it was a valuable lesson to learn about local community dynamics. A successful scheme must develop from the ground up. It requires a local “champion” or the support of a small group enthusiastic and dedicated people. The support of the school authorities, the local authority, the Gardai and other local stakeholders in the local area is clearly also essential to achieve success.

The development of local commitment and enthusiasm for a scheme is the most critical factor to success in Safer Routes to School schemes.

The pilots have shown that this enthusiasm can be difficult to generate, and has required a great deal of time and effort on the part of the Local Authorities, the DTO and particularly some very committed consultants, in ‘selling’ a scheme to a school community. However once an active working group has been established, the schemes gather momentum, and an increased commitment to walking and cycling can become accepted as a normal part of school operations. The initial four targets set were found to be too rigid to be applied across very different school circumstances. Allowing schools the to set their own targets is possibly a more encouraging approach.

The critical factors for success were found to be:

1. Schools that are **Enthusiastic** in their involvement in *Safer Routes to School* schemes.
2. **Champions** and **Key Supporting Personnel**.
3. **A Working Group** made up of school, parental, pupil, Gardai and Local Authority representatives and perhaps other local interests to pursue the scheme
4. A **True Partnership** between the working group and other involved public agencies.
5. **Technical Assistance** for the Working Group on the methods of producing and implementing a package of school travel measures.
6. **Parental Involvement**.
7. **Support of Pupils**.
8. **On-going Support** through promotion and innovation and continued community involvement to sustain the *Safer Routes to School* schemes

6.1 Enthusiastic Involvement

Schools, who recognise school travel trends as a growing problem and are willing to implement change to address the problem, are crucial to the success of a *Safer Routes to School* scheme.

The enthusiasm of the school principal or a teacher is invaluable. School principals are a focal point in school; they have power to authorise and delegate and, they are frequently the driving force to see things through. If they are committed to the scheme, as was the case of St Cronin's in Bray, the project stands a much greater chance of success. The pilots showed that both parents and school staff groups are happier to commit to a scheme when each knows that the other group is supportive.

Benefits to the school such as prestige, recognition, ideas for curriculum projects and awards or incentives schemes can encourage school involvement.

6.2 Champions and Key Supporting Personnel

In each successful scheme there has been a small group of people, usually a few parents or a teacher, who have led the scheme from its inception through to its successful conclusion. These people are the backbone of any *Safer Routes to School* project. However this reliance on human resources inevitably means that projects are vulnerable. These small teams of parents/teachers, who introduce and nurture the schemes, expend huge effort on the projects and can often feel isolated. They require constant support from the local authorities and other agencies.

Key people need to be supported and linked to resources i.e. personnel within public agencies and information such as guidelines and publications. They should also be linked to a wider Safer Routes to School programme, to get reassurance that their efforts are appreciated and to allow for information exchange and the pooling of ideas.

6.3 Working Groups

Establishing a working or action group in the initial stages helps to develop local ownership of the scheme and provides a driving force for successful implementation. Often a lot can be achieved simply by gathering together representatives of bodies associated with the school. A vital role for the group is the persuasion of the wider school community, especially parents, that they have a part to play in a school travel plan.

Group members should represent as wide a cross section as possible, and could include:

- Students/pupils
- Teachers
- Parents
- A member of the Board of Governors.
- A Local Authority transportation or road safety department representative.
- Local Gardai
- Bus Operators
- Local businesses.
- Road Safety Officers

- Health Promotion Environmental Officers
- Local Authority Environment Officers
- Environmental/ Energy Agencies

Reiterating the need for local ownership, *Safer Routes to School* scheme is best agreed and developed by a school based working group. *Safer Routes to School* schemes are new initiatives in the Irish context and the working groups need and welcome resource materials on how to go about developing a School Travel Plan, and the types of measures that can be implemented.

6.4 Partnership and Technical Support

Genuine Partnership between the Working Group and the Local Authority is important. The Local Authority should be available to provide technical support to a scheme, as required, and at the same time present a realistic picture of what can be provided. Liaison with the local authority may take the form of a representation on a working group or other arrangement as appropriate.

Safer Routes to School schemes have transportation, safety, community and planning implications and as such extend across departmental boundaries within the local authority organisation. Local Authority personnel liaising with schools must, therefore, be able to provide cross-departmental information and support.

6.5 Parental Involvement

Various elements of a *Safer Routes to School* scheme will require different levels of parental involvement. A walking bus, for example, requires a high level of commitment from the organisers, volunteers and parents, whereas other measures such as parking restrictions simply require agreement.

The experience of the pilot schemes has shown that promoting walking and cycling to school, as part of a child's development, resonates positively with most parents. Recent public attention on childhood obesity seems also to be an important motivator in attracting parents to become involved in a scheme. The social and health benefits of a scheme should be promoted to encourage the involvement of parents.

Safety and security are the prime concern of parents. Therefore when schemes are first proposed, parents often require a full range of pedestrian and cycle infrastructure to be provided, prior to allowing their children walk, cycle or take the bus to school. In the pilot schemes this desire was strongest where schemes were viewed by parents as "Local Authority" projects and where parents felt that the Local Authority could and should make the desired changes on the ground as part of the scheme.

Safer Routes to School schemes have to be presented and accepted as local community-based projects that cannot provide a panacea for all door-to-door safety concerns. Frequently, many safety concerns will dissolve as the schemes are developed. Nevertheless the schemes must include safety measures and/or walking and cycling infrastructure. This serves to both address necessary safety issues and to help secure parental involvement.

Interestingly people are often surprised by the cost of providing what seems like simple measures such as traffic lights and cycle

lanes. When parents were made aware of the cost of providing such infrastructure their expectation of what could be delivered by the Local Authority became more realistic.

6.6 Pupil Support

An interesting outcome of the pilots was the enthusiasm with which children greeted the Walking Bus. The fun of walking with friends seems to be the main motivator for children, and bad weather doesn't seem to reduce this enthusiasm. The Walking Buses encountered a certain amount of coldness among pupils above a certain age, but this was reduced by incentives, publicity and the assignment of roles to older children such as 'Junior Supervisors'.

As part of the Griffith Avenue pilot scheme, the issues of school travel were presented to Comhairle na n-Óg (Dublin City Council's Junior Council Chamber) The Comhairle is made up of representatives, aged 7 to 17, from schools in the area. This resulted in the Comhairle members (the local students) clearly recognising that car-based school travel is a problem and that they could offer many realistic solutions. It was also evident that messages from other initiatives such as "Walk to School Week" and "Car Free Day" were being absorbed and that this growing awareness can be built on in *Safe Routes to School* schemes.

6.7 On-going Support

There appears to be a constant need for some element of reward or incentive when innovative ideas are promoted in schools and among students. Support materials are welcome, especially those that allow for personalising the school. The offer of helping to establish school websites or web pages with *Safe Routes to School* information was also popular with schools.

Involving the wider community such as local business, as happened in Laytown, can offer an important asset in promoting schemes and providing on-going incentives and competitions.

The small teams of parents, teachers or other local people, who are the key personnel in schemes, all want and need to be linked to resources and other involved schools. Appropriate mechanisms to encourage or facilitate such linking should be developed. Computer networks could be helpful in exchanging information, providing suggestions and connecting organisers. Face-to face contact is also important in expanding the knowledge base and providing a sense of reward and recognition. Media coverage also can be useful in giving recognition to those involved, in generating pride in the school and encouraging new participants.

Innovation and continual promotion are required to sustain schemes. Forming networks of involved schools can assist in achieving this.

7 INTERNATIONAL EXPERIENCE

Where local communities are willing, Safer Routes to School can achieve its objectives. The successful pilots have demonstrated that a major impact on school travel can be achieved. Significant health and environmental targets can also be met. In addition, what has emerged from the pilots is that social capital can be built on the back of these projects. Communities have interacted in an inclusive and supportive manner, working together and in partnership with the Gardai and other authorities to solve local issues, and children have been exposed to this process. The relationship between the Local Authorities and the local community can especially profit from the positive nature of the schemes.

The question now is how best to go forward? In attempting to answer this question it is worthwhile reviewing the UK and Canadian models for Safer Routes to School implementation and the structure of the Green-Schools model, a comparable existing Irish Scheme.

7.1 The UK Safer Routes to School Model

Safer Routes to School in the UK has been developed from pilot schemes in the mid 1990's to a full nationwide programme established jointly by the Department for Transport and Local Government and the Department of Education, in 2003 which aims to have a school travel plan in place in every school in England by the end of 2010.

7.1.1 Operation

In the UK, most Local Authorities have Travel Advisors who assist schools to produce and implement School Travel Plans. A School Travel Plan is a document which sets out a package of measures for reducing the number of car trips made to school by parents and staff for identifying ways of improving safety and promoting sustainable travel alternatives for the school journey. These plans include: a review of the existing situation, evidence of consultation with parents and Local Authority personnel, proposed initiatives and targets and a programme for implementation, monitoring and review.

A School Travel Plan should include:

1. Introduction
2. Brief description of school
3. Evidence of consultation with parents and local authority
4. Summary of schools transport and road safety problems
5. Proposed initiatives and targets, for example:
 - a. Develop school safety zone
 - b. Install cycle parking
 - c. Cycle proficiency training for all first year students
 - d. Double numbers walking/cycling
 - e. Ban parking outside school
 - f. Include SRTS info as part of school prospectus
 - g. Incorporate sustainable travel into curriculum where possible
6. Programme for implementation
7. Plans for monitoring and review.

The School Travel Advisor also acts as a liaison officer between the school working group and local authority traffic/road safety department regarding physical works that may be required as part of the plan. School Travel Advisors can avail of government guidelines and publications. Recently, regional school travel advisors have been appointed to act as an extra layer of support for local authority School Travel Advisors and to provide a link to central government.

The *Safer Routes to School* programme in the UK is also heavily supported by Sustrans - an organisation that encourages people to walk and cycle more by promoting, designing and building safe cycle and walking routes. In many instances Sustrans provides direct assistance to schools in the development of plans and has also produced some very useful resource material.

7.1.2 Funding

The Department for Transport and Local Government and the Department of Education jointly established the SRTS structure in the UK, in 2003. The Department for Transport provides funding to local authorities for the School Travel Advisors and the Department of Education provides grants to schools that have completed school travel plans. Further support is planned by way of a grant to Sustrans to expand the National Cycle Network in the vicinity of schools to make it easier and safer for pupils to walk or cycle to school.

7.1.3 Effectiveness

Anecdotal evidence from School Travel Advisors suggests that the initial round of *Safer Routes to School* was resource intensive, similar to the experience of the DTO pilots. However, as the programme matured, schools began to take greater responsibility for the development and implementation of school travel plans with the result that less in-depth input was required from the School Travel Advisors.

Recent research (2004) for the Department of Transport in the UK has shown that their Safer Routes to School programme, in operation since 2001, can be effective at reducing car traffic to school. Since 2001, 3109 schools have implemented school travel plans, and a review of 80 schools in 23 local authorities with useable before and after data, has shown that 76% have achieved reductions in total car use. 41% have achieved reductions in total car use in excess of 20% and 10% appeared to have more than halved overall car use¹⁴. The research concludes that when local authorities engage with schools the overall effect of car use at all engage schools is likely to be in the order of 8- 15%. If a similar level of reduction in car trips was achieved throughout the Greater Dublin Area this would amount to 8,500 to 15,800 trips in the morning peak period. To put this in perspective, the peak hour capacity of the two LUAS lines is 11,580 persons per hour.

¹⁴ Cairns S, Sloman L, Newson C, Anable J, Kirkbride A & Goodwin P (2004) *'Smarter Choices – Changing the Way We Travel'* Final report to the Department for Transport, London, UK 2004

Figure 3 shows the reduction in car use in UK schools with a school travel plan were data was available. The data shows the typical profile of the most and least successful local authorities.

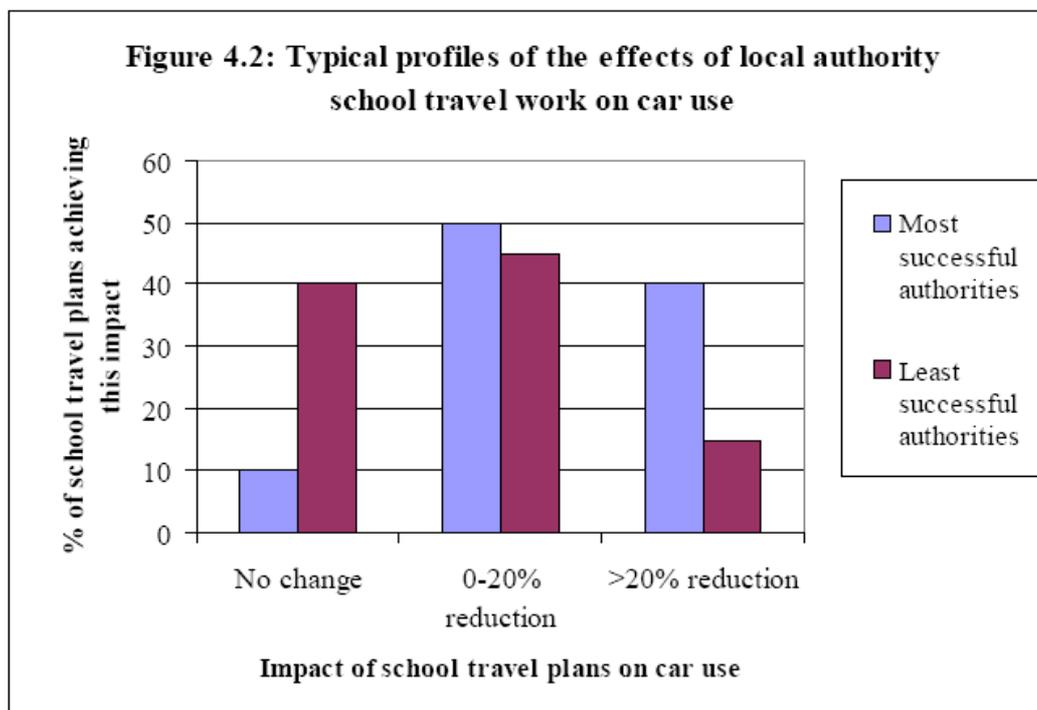


Figure 3 Source: 'Smarter Choices – Changing the Way We Travel' - Final report to the Department for Transport, London, UK 2004

7.2 Canadian Safer Routes to School Model

Safer Routes to School in Canada is implemented and maintained at the province or territory level, which has resulted in a variety of scheme types. The sport and recreation branches of local government or other public agencies administer most of the schemes. However, the two most successful schemes, those in British Columbia and Ontario, have independent Safer Routes to School programmes in place that are supported by public agencies but not managed by them.¹⁵ Both schemes offer resources and technical help to schools to develop a package of measures similar to school travel plans. Provincial and regional coordinators are available to support the schools in their work, as in the UK, but the onus is on the school community to deliver change¹⁶.

In contrast to the UK system, the programme is primarily focused on the parents involved with the school community rather than the school administrators and teachers.

7.2.1 Funding:

In British Columbia, Insurance Corporation of British Columbia privately sponsors "The Way to Go! Project", with support from public agencies. In Ontario, the program is implemented and maintained by the Green Communities Association - a non-profit, community-based environmental organisation. Funding for the project is delivered through a variety of public sector and corporate partners. The Green Communities

¹⁵ Go for Green; A&SRTS special millennium report

¹⁶ WALK 21 2004 – Cities for People, Safer Routes to School Paper presented by Jacky Kennedy (Ontario) and Bernadette Kowey (British Columbia)

Association provide a SRTS Resource Guide and provides 'seed funding' of \$30,000 (€18,700) over a three-year period. These funds allow the local SRTS project to hire a part-time coordinator, who can help gain leverage with other partners; the co-ordinator also helps to ensure the credibility and efficacy of the programme¹⁷.

7.2.2 Effectiveness

In British Columbia over 350 schools are actively involved in the programme, and in Ontario 21%, or 330,000 elementary school students have participated in at least one SRTS activity to date.

7.3 Northern Irish SRTS pilot programme

Northern Ireland Authorities embarked on their pilot programme of six schools in 2002. Following on from this and in particular from the successes gained at two schools: St. Brigid's College secondary school where the numbers cycling quadrupled to 28 pupils, and St Josephs secondary school where a 2% increase each in cycling and walking was achieved, the SRTS programme is being extended region wide from 2005. Travelwise NI Safer Routes to School, a joint initiative between the Department for Regional Development and the Department of Education, will administer the programme.

7.3.1 Operation

Schools will be involved in either accelerated or enhanced programmes.

In the accelerated programme Schools are given education and awareness materials from the department of education. Northern Ireland Roads Service will provide support though its travel plan co-ordinator and will provide engineering support following consultation with the school, such as road markings, waiting restrictions, and new crossing facilities. The Department of Education is responsible for the provision of infrastructure within the school grounds such as cycle shelters, and lockers.

The enhanced programme is a step beyond the accelerated programme, where schools commit to developing a school travel plan and are considered for greater infrastructure improvements including extended walking and cycling routes in the vicinity of the school.

7.4 New Zealand Pilot Programme

Northshore City Council embarked on the New Zealand pilot programme in 2003, whereby two schools were assisted in developing travel plans in similar fashion to the UK. The emphasis was on consultation and establishing a multi disciplinary working group who developed a plan of actions for which the school, parents and local authority were responsible. According to the co-ordinator of the pilots, the method of initial consultation "Planning for Real", where a large map of the local area is used as a basis to invite community discussion regarding travel to school, was instrumental to community involvement and commitment.

The two pilot schemes were championed by committed school principals, and achieved an increase in both cycling and walking, through measures such as walking

¹⁷ Ibid

buses, cycling training, information packs for new parents. The scheme gained a lot of publicity and a regional programme has recently been established supported by the development of six new school travel planning posts in the local authority

7.5 Commonalities in International Experience

The SRTS programmes reviewed are school-based programmes that focus on assisting school communities to develop plans of action to promote sustainable and safer school travel suited to local circumstances. A network of local and regional administrators, who can avail of centralised guidelines and publications, manage the schemes. Supporting infrastructural measures are provided as part of the programme.

8 THE GREEN-SCHOOLS MODEL

The Irish Green-Schools programme deals with wider environmental issues than the issue of travel to school. However, the motivation behind the initiative is similar to that of the *Safer Routes to School* so a brief examination of the structures and practices was carried out to see what lessons could be learned and to see if a link could be made between the two programmes.

Green-Schools is both a programme and an award scheme, and is aimed at offering schools a well defined way of incorporating environmental action in the day to day running of the school and involving the wider community at the same time. Schools develop an environmental action plan, based on a seven-step programme. A Green Flag award is given to schools that have implemented the programme and achieved change, however the programme is designed to be flexible, allowing schools to set their own targets based on their own circumstances. The rationale is that success increases confidence and builds enthusiasm for setting subsequent targets, whereas failure due to initial over ambition can be very de-motivating.

Green-Schools has been very successful in generating involvement and enthusiasm from schools and important lessons can be drawn from the structure and operation of the scheme. The Green-Schools programme is part of an international Eco-Schools programme and is operated in Ireland by An Taisce, in partnership with Local Authorities'. Green-Schools has a relatively small annual budget that is partly financed by Local Authorities who are partners in the scheme. Currently the staff consists of 5 full-time staff, 1 part-time with 3 staff involved in school visits.

8.1 Operation

Schools, that express an interest, are provided with a resource pack that sets out a seven-step programme similar to the process of developing a school travel plan. The steps are:

1. Establish a Green-Schools **Committee**. Ideally, the committee should include pupils, teachers, school management and parents.
2. Carry out an **Environmental Review** of the existing situation at the school
3. Develop an **Action Plan** with specific targets and timetable for implementation
4. **Monitor** and **Evaluate** the plan as it is implemented
5. Include the work in the school **Curriculum** - materials are provided that give ideas on how to integrate environmental issues into the normal educational programme.

6. **Inform and involve** the school and community. A publicity programme must be devised to keep the school and wider community involved and informed through an action day as well as displays, assemblies and press coverage.
7. Publish a **Statement of Commitment (Eco Code)** by the school to environmental good habits

Schools apply for assessment in their own time after the seven steps have been successfully in operation for at least 6 months. The assessment procedure includes a visit to the school by a Green-Schools representative. The evaluation committee includes the Local Authority Environmental Education Officer. Once a Green Flag has been awarded it must be renewed every two years, continuing the achievement of the initial theme and integrating the new theme into the programme.

The following aspects of the Green-Schools approach are of particular interest:

- There are no financial incentives, but the “Green Flag” and associated prestige for the school seems to be sufficient reward. This has proven to be sufficiently attractive for the schools to initiate the process themselves by contacting An Taisce or their Local Authority.
- Local Authorities are active partners in the schemes and the local authority environment/education officer assists schools in developing their plan.
- The programme started in 1996 and the level of school interest has developed informally among schools rather than through aggressive promotion.
- A review of the programme found that teachers are the most effective means of communicating the environmental message to young people, so resources have been channelled into teacher seminars for this purpose.
- Green School is recognised by the Department of Education and Science as a suitable Action Project for Junior Certificate classes. Green-Schools can be worth 60% of the marks awarded for this core subject. For primary schools Green-Schools can also be used as a mechanism to implement the recently introduced SESE (Social, Environmental & Scientific Education) section of the new curriculum. According to the organisers of the programme, there is sufficient flexibility within the Irish school system to incorporate the programme within the normal curriculum, and teachers welcome the resource material. Details of organisations, which publish useful curriculum material, are provided to schools.
- Schools are innovative in promoting and advertising the scheme; many have arranged sponsorship with local businesses.
- The local authority environmental education officer acts as a liaison between the school and the local authority and audits the completed schemes; they carry out assessment visits to schools on behalf of Green-Schools.
- Green-Schools promotes linkages between secondary schools and their feeder primary schools

8.1.1 Success

The programme started in 1997, in April 2005 approximately 2000 schools registered for the programme, 48% of all schools in Ireland, over 650 schools will have been awarded the Green Flag by the end of the 2004/2005 school year

8.1.2 Effectiveness

A 2001 survey of Irish schools participating in the Green-Schools programme indicated that schools that have fully adopted the Waste theme were on average diverting 60% waste away from landfill. The Irish programme has proved so successful that Ireland recently represented the Eco Schools programme at a presentation of the programme to the UN.

8.1.3 Links with Transport

Green-Schools is a themed programme; schools initially deal with the theme of litter & waste, and then move onto the theme of energy followed by water transport and finally healthy living. This provides an ongoing programme for the schools to renew their award every two years and the evidence is that, as the school works its way through the themes, enthusiasm increases with growing experience and success. In Ireland schools work on the theme of waste & litter for their first Green-Flag, energy for their second Green-Flag (first renewal) and water for the third Green-Flag (second renewal). As yet transport has not been introduced to the Irish Green-Schools programme. It is envisaged that the theme will be introduced. However, at present it appears that Green-Schools has been somewhat a victim of its own success and the administration cannot currently resource the introduction of a new theme.

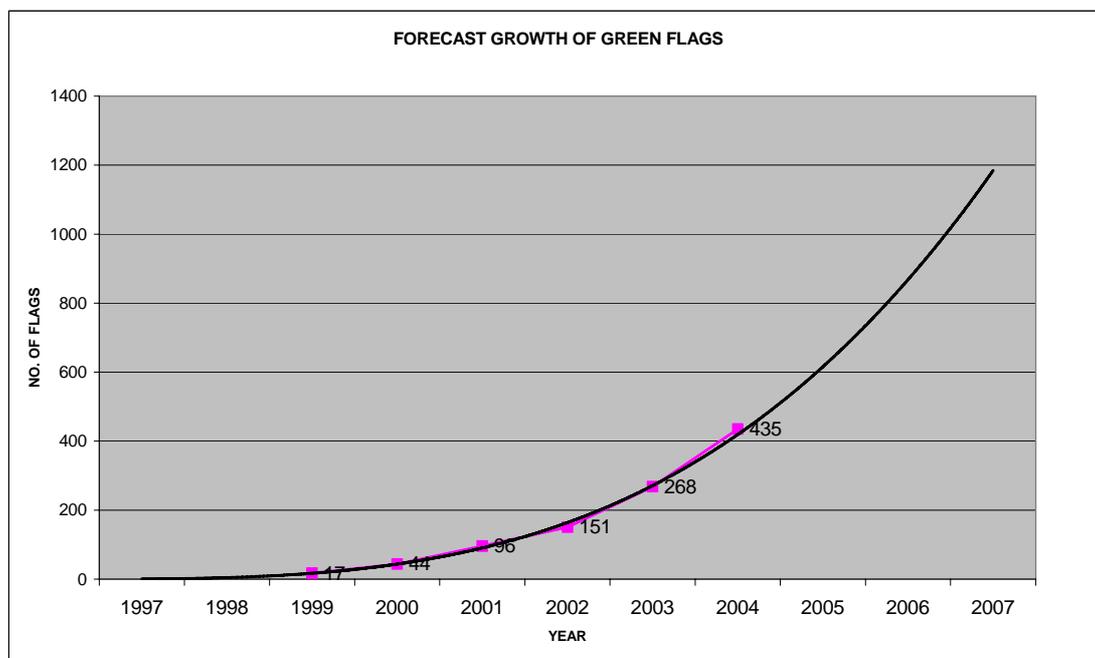


Figure 4: Predicted Growth in Green-Schools Flags Awarded (Source Green-

8.2 Potential for Integrating *Safe Routes to School* and Green-Schools programmes

The Green-Schools programme offers many of the success factors required by the *Safer Routes to School* programme. The most important of these is the established working groups within schools who are already enthusiastic about change and are

familiar with a process of developing a plan of action. The seven step approach of Green-Schools is also identical to that required to develop a School Travel Plan.

However there are issues associated with *Safer Routes to School* that could represent challenges to the existing Green-Schools approach:

- School travel is less contained within the school than the current themes. A Green-Schools travel theme would require wider community involvement in addition to what can be achieved just by pupils and school management. Currently Green-Schools have to involve and inform the wider community to achieve their Green-Flag, as a vital step of the programme. The extent and composition of the wider community varies from school to school but typically includes parents, Local Authority Environmental Officer, local environmental groups (e.g. Tidy Towns, Area Development Groups), the Gardai, local businesses, sporting groups etc.). External membership and input to the working group would have to be emphasised as a requirement under a Travel theme.
- Direct parental involvement is essential. This includes dealing with parental expectations for infrastructural improvements. The Green-Schools programme to date has not been as dependent on the involvement of parents, as a travel theme would require. However Parents have been a very important aspect to the programme, the vast majority (>90%) of Green-Schools Committees have a parent representative. Again this greater parental involvement would need to be emphasised as a requirement of a Travel theme.
- Schools may also have to engage with external bodies, for example bus operators and local business regarding parking. Some Green Schools have experience of this, in dealing with private contractors and local authorities for waste collection and provision of recycling facilities.
- Funding will be required to implement infrastructural measures, associated with the School Travel Plan, within the wider school catchment. Green-schools do liaise with the local authority through the Environmental Officer; this relationship would need to be extended to include Road Safety and Transportation officers.
- School travel issues often relates to a number of schools within an area. Can Green Schools allow for co-operation between schools to achieve area- wide solutions?

Green-Schools is a popular and successful programme. If the concerns outlined above could be addressed in the development of a Green-Schools travel theme, it could be a very effective method of implementing Safer Routes to School. Co-ordinating the programmes would avoid replication of a parallel structure, and the associated time and effort required to build the credibility and popularity with schools. It would also protect against swamping schools, particularly teachers, with programmes competing for their time and commitment.

9 NEXT STEPS

The key conclusion arising from this report, the experience of the pilot schemes and international *Safer Routes to School* programmes, is that there is merit in pursuing

this initiative as it has potential to address significant transport, health, and environmental and social issues.

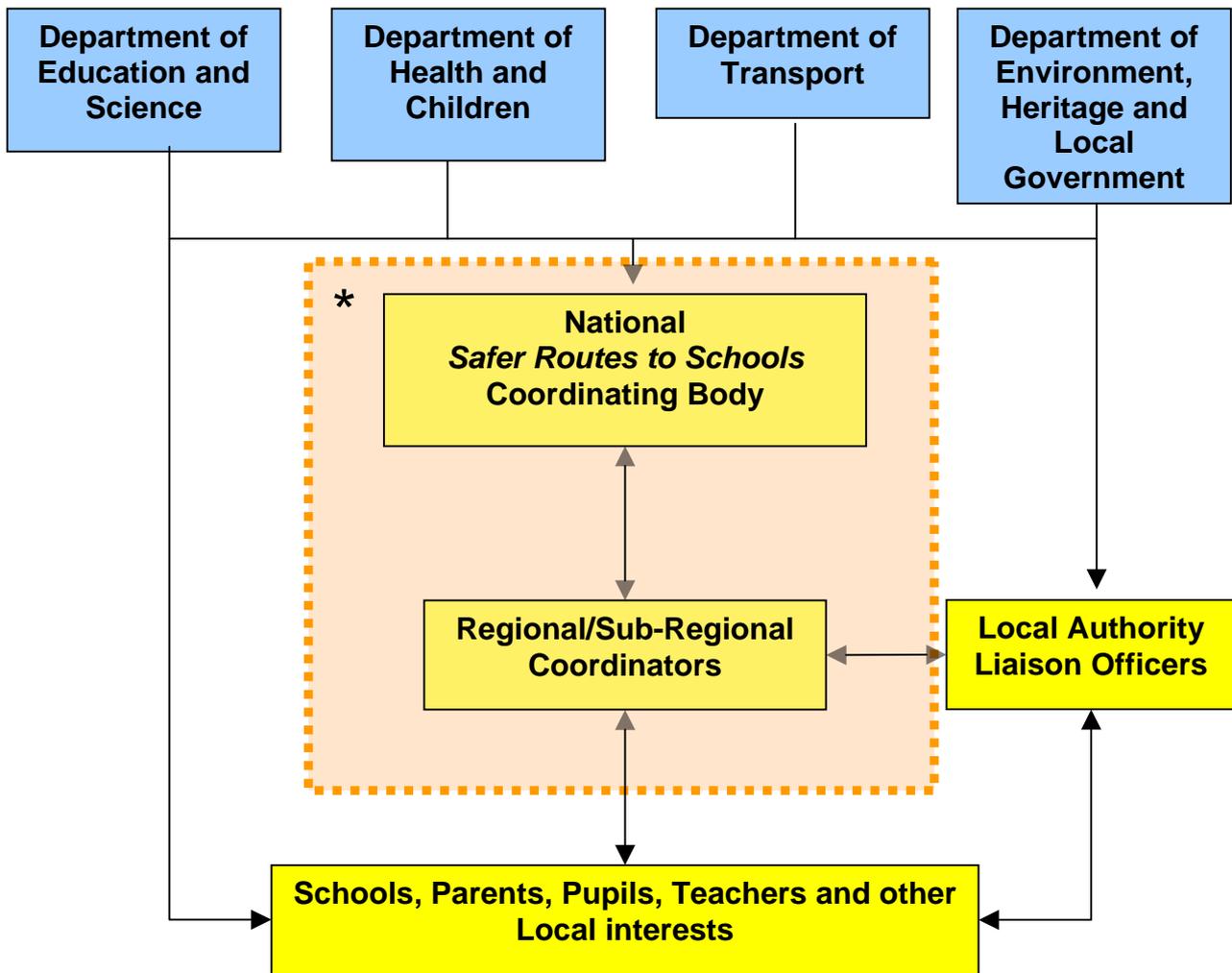
The knowledge gained in the pilots as to what can lead to successful schemes, a review of how those factors have been supported by the administrative structure of successful international schemes and examination of an existing successful Irish school based scheme, has led to the recommendations outlined below:

The above structure could be developed as a new independent structure or incorporated into an expanded Green-Schools administration.

1. An interdepartmental group should establish a national policy on sustainable school travel.
2. A national *Safer Routes to School* structure should be established, supported by the Departments of Transport, Health and Children, Education, Environment and Local Government. (see outline structure below)
3. This *Safer Routes to School* structure should be focused on assisting interested school communities to develop school travel plans.
4. *Safer Routes to School* should be developed as an independent national scheme. This would:
 - a. Provide the schemes and schools with nationally recognised prestige and acknowledgment.
 - b. Facilitate networking of involved schools and people.
 - c. Provide a one-stop-shop assistance for developing schemes.
 - d. Help overcome the barrier of expectations from Local Authorities.
 - e. Consolidate publicity, information distribution and resource material.
 - f. Ensure consistency in the schemes and allow for robust auditing procedures.
5. *Safe Routes to School* should be administered by regional or sub regional coordinators, who could liase with schools and with personnel within local authorities.

9.1 Proposed Irish SRTS Structure

The recommendations could be facilitated in the structure proposed below:



* *Green-Schools could provide these functions.*

9.2 Proposed Operation

It is proposed that the SRTS programme be developed as a community based programme, in a similar fashion or as part of the Green-Schools programme. Enthusiastic schools will request to become involved in the programme. The principal, member of staff or parents association can initiate schemes. Incentives for schools to become involved should be provided; this might range from the prestige of an award scheme like the Green-Schools Model to funding for infrastructure inside the school as in the UK SRTS schemes. If possible the network of schools involved in the Green-Schools scheme should be utilised. Publicity and support for the programme from the Government, particularly from the Department of Education would be of great assistance in encouraging schools to participate in the programme.

School working groups will be assisted in developing a School Travel Plan for the school by the SRTS co-ordinator and the local authority liaison officer. This plan should detail the methods of promoting walking, cycling and public transport and delegating resources and responsibilities. Web based resources to assist the

schools in developing and implementing plans should be developed. These resources should link with existing programmes such as the Department of Education and the Department of Health SPHE programme for secondary schools and the EPA 's new web-based resources for primary schools.

Where plans have been assessed by the SRTS co-ordinator and the local authority liaison officer and school have shown a commitment to action, the Local Authority may apply for funding to provide supporting engineering works to support the plan. This funding could be delivered from departmental/cross departmental level budget through the central SRTS administration or in the case of the GDA could be administered through the DTO traffic management grants.

9.3 Actions Required

For a national scheme to be successful five government departments must cooperate, in the venture by taking the actions set out below:

Department of Education and Science

- Encourage schools to participate in the programme.
- Encourage incorporation of the programme into the curriculum, particularly in the emerging SPHE and the SESE curriculum.
- Establish a “post of special responsibility” for school travel. This would provide a teacher with responsibility for progressing the development and implementation of the school travel plan.
- Assist in the development of national SRTS resources and toolkit. – These should be made available on the Departments Website
- Assist in forming networks of involved schools, to disseminate information and support co-ordinators.
- Facilitate teacher seminars.

Department of Environment, Heritage and Local Government

- Encourage Local Authorities to participate in the programme.
- Develop a School Travel liaison post within local authorities; this could be an expanded role of the environmental education officer or road safety officer. This role should be given sufficient status to liaise with the transportation and road engineers on delivering infrastructural measures arising from the school travel plan.
- Promotion of SRTS within the planning and roads department, through seminars so that the principles can inform the development plan and local area plans and development control. For example applications for new schools or works at existing schools should be conditioned with the development of a school travel plan.
- Assist in the development of national SRTS resources and toolkit.
- Promoted the programme through agencies of the DoEHLG that have links to schools, such as the EPA, Sustainable Energy Ireland, etc...
- Link promotion of school travel plans with other initiative such as “I walk to school week”, Car Free Day, Tidy Towns etc...

Department of Health and Children

- Promote the programme through the National Children’s Office and the Health Promotion Unit.
- Encourage the participation of Health Promotion Officers in Working Groups.

- Assist in the development of national SRTS resources and toolkit.
- Link the promotion of school travel plans with other initiatives such as the Health Heart Campaign, Sli na Slainte, etc.

Department of Transport

- Assist in the development of national SRTS resources and toolkit.
- Co-ordinate cross departmental funding for infrastructural measures to support school travel plan
- Co-ordinate promotion of the programme.
- On Road cycle training and pedestrian safety training to be provided to schools as part of the programme. This could be administered through road safety officers or through independent agencies
- Monitor the effectiveness of the schemes

Department of Justice

- Encourage Gardai to become involved in Safer Routes to School schemes, either through membership or support of the working groups.

