

Travelwise to School – Delivering School Travel Plans in the New Zealand Environment

Chapter One – Introduction

1.1 Purpose

This paper examines and evaluates the Travelwise programme established by the North Shore City Council, and subsequently developed within the Auckland region, and nationally through participation in the Travel Behaviour Change (TBhC) strategy and programme. The wider TBhC programme encompasses all changes in travel behaviour for every sector of society, of which school travel is but one, albeit important, component. However, there were some clear lessons learnt during the development of the Travelwise to School programme that are applicable to other sectors. This paper shares those lessons; hopefully to assist other Travel Behaviour Change programmes achieve greater success.

1.2 Background

The Travelwise to School Programme is a community road safety programme initiated by North Shore City Council in February 2002. It is the first programme of its kind in New Zealand, bringing together a school and its community in the development of a school travel plan. School travel is a major contributing factor to congestion in North Shore City. The number of school-related journeys in the Auckland region almost doubled from 1989 to 1998. It has been estimated that up to 40 per cent of travel in the Auckland region during peak times is education-related.

Travelwise to School adopts a holistic approach towards reducing congestion and increasing safety, by encompassing a wide range of issues and solutions. It encourages community buy-in and ownership of local issues, reduction in car related journeys, creation of new road safety initiatives and reduction in the number of child casualties. The fundamental aim of the Travelwise to School programme is to encourage a school community to identify its local road safety issues and tailor solutions to resolve their issues of concern.

Implications of future trends

By 2021, it is estimated that the population for North Shore City will be in the range of 242,500 (NSCC, 2002). This would give a population increase of 28 per cent from 1996 to 2021. In 2001, the number of primary school children aged between 5-9 years in the North Shore was 12,732, a figure which constitutes approximately 6.9 per cent of the total population (Statistics New Zealand, 2001)¹. Although the City Blueprint identified a key future issue of declining size of households it is likely that numbers of primary school children will still continue to rise, therefore increasing the pressures of traffic congestion at the school gate.

To succeed with the implementation of the Travelwise to School programme, commitment and effective partnerships must be established and developed throughout the Council with other agencies, organisations, schools and local residents.

1.3 Principles of the programme

Four basic principles of the programme have been found to be crucial to the success of developing and implementing the school travel plan.

- *Principle 1: Develop an equal partnership with the schools and local community*

Establishing a partnership on an equal footing is essential to the ethos of the programme, as it is essential that the school and community view the Travel Plan as a living document that is used on a daily basis. The school must be encouraged to participate in the process and to be part of a decision making process that is open, creative and transparent to develop the plan, which encourages long term behaviour change.

- *Principle two: Involvement of the local community*

Involving the local community in the development of the School Travel Plan is essential in encouraging changes in modal behavioural patterns. The school is seen, especially with Primary Schools, as being at the heart of the community, so active participation must be promoted to in turn encourage the wider community to think about their travel and opportunities for change. Participation in the monitoring group is by open invitation.

- *Principle three: That the School Travel Plan is owned by the school and the local community*

All of these programme principles complement each other and contribute towards providing a quality result. It is important that the wider community shares ownership of the plan and is equally responsible for implementing it. It is only when the wider community actively participates in the programme that long lasting benefits and an overall travel behaviour change can occur.

- *Principle four: That the Travelwise to School: programme is based upon a holistic approach*

The plan should adopt a holistic approach, looking at all aspects of a community including social, economic and environmental issues which impact on local communities. This approach is fundamental in laying down the foundations to encourage long-term shifts in travel behavioural patterns.

Chapter Two – National, regional and local perspectives

2.0 Introduction

This chapter examines the basic legislation and strategies that are currently in place and which Travelwise to School falls under and supports. Three levels are examined, national, regional and local. At national level there is the Local Government Act and New Zealand Transport Strategy, together with a national strategy for walking and cycling – “getting there on foot by cycle”. At regional level: a draft road safety plan, land transport strategy, walking strategy, travel demand strategy and the growth strategy. At local level the District Plan, City Blueprint, City Blueprint Action Plan and draft Cycle Strategy.

2.1 National level

At national level, legislation supports the Travelwise to School community consultation, a vision for a sustainable transportation network and for the reduction in the number of road accident casualties.

2.1.1 Local Government Act (2002)²

The Local Government Act (2002) came into force in December 2002. The Act states the obligations of local authorities in relation to consultation with interested and affected persons and sets out the nature and use of special consultative procedures. The Act (Part 5 cl66) states that:

“When carrying out any consultation, whether in accordance with the special consultative procedure or otherwise a local authority must:

Take steps to provide appropriate information to the community and any particular communities of interest affected by the matter under consideration.”

The purpose of this legislation is to ensure affected parties are consulted on changes that affect them. There has been growth in the area of consultation and debate as to the appropriate level for any given project.

2.1.2 New Zealand Transport Strategy (2002)³

In December 2002, the New Zealand Transport Strategy was released. This is a document which will guide government decision-making on transport. The vision of the strategy is that: *“By 2010, New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system”*.

The strategy will contribute to:

- assisting economic development
- assisting safety and personal security
- improving access and mobility
- protecting and promoting public health
- ensuring environmental sustainability.

The point of difference with this piece of legislation is the emphasis on a “holistic” transport system rather than one that focussed on a benefit/cost ratio as the prime driver for delivering solutions.

2.1.3 Land Transport Management Bill (2002)⁴

This Bill provides for a more balanced and flexible funding framework for land transport. This means that while roading will continue to be of key importance, everyone's needs will be met; those of motorists, passengers, public transport users, commercial operators, cyclists and pedestrians. This will allow funding to be given to a wider group of people, and to anyone who can prove that their project will benefit the overall transport sector. The Travelwise programme is a good example of this.

2.1.4 Road Safety Strategy 2010⁴

The strategy aims to achieve a level of safety in New Zealand by 2010 equal to that enjoyed by the safest countries in the world today. This would mean halving our current fatality rate over the next 10 years, and five years into the programme only small gains have been made. More work, especially involving those under 25, needs to be done if this programme is to succeed.

2.2 Regional level

At regional level, Travelwise to School is supported by strategies that increase accessibility and offer alternative modes of travel.

2.2.1 The regional road safety plan

This was approved by the Auckland Regional Council in early November 2002 and proposes a range of strategies to further reduce the Auckland region's road toll to around 50 by 2006.

2.2.2 Regional Land Transport Strategy 1999 (draft 2002)⁵

The objectives of the strategy are:

- To support regional and local land use strategies
- To provide access for people and businesses
- To maximise the efficiency of the transport system
- To avoid, remedy or mitigate the adverse effects of transport on the environment
- To maximise the safety of the transport system.

Under the Auckland Regional Land Transport Strategy 1999, the ARC has developed three strategies to encourage alternative travel options:

- **Regional cycling strategy**
This strategy was revised in April 2002 to incorporate inputs received from key stakeholder groups, and adopted by the ARC's Passenger Transport Committee in July 2002. The revised draft strategy was open to further comment during consultation over the update of the Regional Land Transport Strategy (from August to October 2002).
- **Regional Walking Strategy**
Promotes walking as a transport mode, and provides guidance to those who plan our communities, manage our roads, or are concerned about the safety of our environment. This strategy is a sub-strategy of the Regional Land Transport Strategy, and was open to further comment in 2002.
- **The Travel Demand Management Strategy**
Promotes travel alternatives to reduce congestion, such as ride-sharing or working from home (teleworking). Again, this strategy is a sub-strategy of the Regional Land Transport Strategy, and was open to public comment in late 2002.

2.2.6 The Auckland Regional Growth Strategy

Adopted in November 1999, it provides a vision for what Auckland could look like in 2050 with a population of 2 million. It promotes quality compact urban environments and identifies, among other things:

- Areas in the region where urban development should not occur
- Opportunities for peripheral urban development and intensification in the future
- Appropriate locations for further employment growth
- The implications for transport and other regional infrastructure.

2.3. Local level

2.3.1 The North Shore City Council District Plan⁶

Aims to enable a transport system that avoids remedies or mitigates the adverse effects of transport activity on the natural and physical environment and protects the amenity value of open space and streets whilst maintaining the health and safety and the economic, social and cultural well being of the people and community of North Shore City.

Policy 1. By reducing the need for travel by private motor vehicle within the city

Policy 5. To reduce the severance of communities caused by major roads, through the provision of facilities where pedestrians and cyclists can cross safely

These policies are further emphasised in the City Blueprint and the Cycling Strategy.

2.3.2 The City Blueprint⁷

The City Blueprint provides a foundation for North Shore City's long-term planning. It is also in line with the Strategic Plan priorities for ease of movement and strategies to improve road safety, promote community wellbeing, show leadership and develop community partnerships.

The Travelwise to School programme is also listed as Action No 58 in the City Blueprint Action Plan, as part of North Shore City Council's work to deliver an effective transport system and encourage walking and cycling and environmentally friendly transport that promotes an active and healthy community.

2.3.2 Draft Cycling Strategy⁸

The cycling strategy has five major goals, three of which effect children. They are:

- *To increase the number of children cycling to school*

- *To improve safety for cyclists*
- *To improve convenience for cyclists*

The goals will be achieved by implementing seven united strategies:

- Develop cycle networks and facilities
- Apply best practice cycle design standards for cycle networks and facilities
- Maintain the cycle infrastructure to a high standard
- Educate and train all road users to improve cycle safety
- Promote cycling
- Improve coordination of efforts amongst groups supporting cycling
- Ensure resources are adequate to deliver the strategy for North Shore City.

Chapter Three – Visions, aims and goals of the strategy

This chapter sets out the visions, aims and goals of the “Travelwise to School” programme and how it applies to the schools.

The vision of the Travelwise to School Programme is:

To actively provide the local school community with an opportunity to participate in addressing local congestion and safety issues and to be an equal part of the decision-making process.

The aim of the programme is:

To encourage a school community to develop and implement a travel plan to reduce car travel and increase road safety in the local community.

The goals of Travelwise to School programme:

The initial goal of all School Travel Plans is to reduce car usage at each school by 10 per cent in the first full year of implementation with a 5 per cent reduction in the following years.

The achievement of these goals links to these key areas:

- Consultative techniques applied in the Travelwise to School programme increase the flow of information on road safety to the community. Information is fed back through the school, parents, word of mouth, media and local community groups.
- The programme involves an equal partnership between North Shore City Council, school and the local community. Methods of consultation and decision-making must include agreement by general consensus and actively encourage the expression of views from the community.
- This is achieved through a range of integrated measures e.g. engineering and educational, awareness raising programmes. Engineering measures include the auditing and investigation of local cycling and walking networks. Educational awareness raising programmes include Walking School Bus, car-pooling, and providing information to new parents and children.
- Encouraging walking and cycling increases levels of fitness and health.

- Consultation with the community assists with the identification of local issues of concern, these issues to be included in either:
 - a. Actions under the School Travel Plan
 - b. North Shore City Councils general maintenance programme or
 - c. Projects for consideration under the Community Road Safety Programme.
- A reduction in the number of school related accidents in the vicinity of the school results.
- Input is sought from children in developing School Travel Plans and encouraging programmes such as Road Sense Road Sense Ata Haere and the Walking School Bus scheme, which promote walking through providing children with a sense of responsibility.

Chapter Four – Implementation

Introduction

This section describes the implementation of the Travelwise to School programme under the headings: role of council, facilitation of the programme, resources, reporting back to council, links with other policies, criteria for future schools participating in the programme, targets, and number of schools taking up the School Travel Plan in the North Shore, regionally and nationally.

4.1 Role of Council

Initially the Council undertook the programme on its own with no outside assistance, which saw the completion of three school plans at Vauxhall, Bayswater and Browns Bay Primary Schools. As the programme matured and grew it became apparent that there was a need to further develop the programme and take it to a wider regional and national level. An application was made to the Road Safety Trust for funding for school travel planners with the intention of developing Travel Plans in up to 20 schools within the city. Approval was given with a grant of \$180,000 being made to Council in late 2003. Within that period, agreement was also reached with the Energy Efficiency Conservation Authority (EECA) to develop a training package to train the school travel planners. This was developed in December 2003 with the result that six school travel planners were recruited and trained in February 2004 and started work developing travel plans in 24 schools.

Indications of interest were received from other councils throughout New Zealand, and staff from three other councils were trained as part of the initial programme. As a result, submissions were made to the Auckland Regional Council (ARC) suggesting that the programme had regional benefits in reducing the level of cars associated with education travel. ARC approached the Government for funding with the result that a grant was made to ARC for a two-year period for the further development of the programme within the Auckland region.

ARC, through the Auckland Regional Transport Authority (ARTA), is now a partner in the programme with the Council where ARTA provides the facilitators to the schools and Council provides the support to the programme in the form of a coordinator for schools within the city and engineering advice to the working party at each school. In addition, Council is responsible for ensuring that all infrastructure requirements for the schools are investigated and where deemed required and fundable, the facilities are constructed.

Council has also been instrumental, in partnership with EECA and ARC/ARTA, and together with Transfund, the national funding agency for roads, (now part of Land Transport New Zealand) in developing a strategic policy for Travel Behaviour Change (TBhC). The policy has been adopted and has a specific funding stream attached, with school travel plans being one of those work streams identified as part of the programme. This has ensured that funds are available for the programme as it develops further.

4.1.1 Facilitation of the programme

The programme was originally facilitated entirely by Council – developing the partnership with the school, providing the travel planners, and implementing the plan. This work is now shared, the Council working with the schools alongside the travel planner from ARTA.

4.1.2 Resourcing

The project is resourced through the partnership agreement with ARTA. Largely seen as a joint initiative, the various resources required for the delivery of the travel plan are sourced from the most logical supplier. For example, ARTA has developed a generic travel plan questionnaire that is used by all schools. The questionnaire can be modified slightly to accommodate the needs of each school but features key questions to provide essential information in helping understand the travel patterns of children and parents. Likewise, Council provides coordination of the travel planners within the city and also the engineering expertise to facilitate the development of infrastructure.

4.1.3 Reporting Back to Council

Each School Travel Plan must be presented to Council before final approval and a request made to the Mayor or his representative to sign the plan on behalf of the North Shore City Council. This important link is made to ensure that the school has confidence that Council will implement the work associated with the plan, and also gives Council the knowledge that the school has committed to the plan and will follow up with surveys and further education measures to ensure the ongoing benefits of the project.

4.2 Links to other plans and policies

The School Travel Plan is an integral part of the City Blueprint in that it encourages the living city theme and the increase of walking and cycling, as well as supporting the development of a sustainable transport network.

It also complements other school programmes, and it has been proposed that an annual meeting be held with the appropriate North Shore Council staff to discuss ways in which the current programmes/strategies can support each other.

4.3 Criteria for schools participating in the programme

In the initial stages Council developed the programme using the criterion that all the participants needed to be willing for it to be successful. In these instances, the commitment from the school principal and Board of Trustees was paramount in deciding the schools. This worked well for the first few schools but it was clearly recognised that a more strategic approach was needed if the programme was to be successful. The programme has now moved to identifying schools on strategic corridors where large infrastructure projects will take place, as well as clustering schools within a small geographical area. This is proving to be of significant benefit to both the schools and the projects concerned.

4.3.1 New school development

Council has also been involved with the Ministry of Education in the planning of three new schools. In these cases, a commitment to the travel plan concept has been reflected in the design and layout of the school, with the Council also participating in ensuring that the facilities on the roads surrounding the school are appropriate for the school and people using them.

In the case of the Oteha Valley Primary School, the design of the school has ensured that all parking takes place within the school grounds, including pick-up and drop-off by parents. No parking is available on surrounding streets but Council is ensuring that all developments in the area have wide footpaths, and pedestrian crossings have been established at strategic locations. The objective with the school was to ensure that the primary form of transport was by walking and cycling, and early indications are that the school is well on the way to getting most of the children walking, cycling or scootering to school. With the development of Albany Junior High School (a year 7 to 10 school), the principle of having all parking take place within the school grounds was again followed. In this case, buses are seen as a primary form of transport and are well catered for with over 10 bus bays within the grounds. The layout of the parking also ensures that parents' cars are kept well away from high pedestrian areas. Parents are discouraged from bringing their children to and from school by ensuring parking is well away from the school.

In all cases the final plans for the school and the surrounding areas were significantly altered as a result of the adoption of the Travelwise programme. This has led to the Council being actively involved with the design of new schools to ensure that access to the school is easy. The school has an ongoing requirement to ensure they actively manage the parking within the school grounds and that it does not flow over on to surrounding streets. An agreement along these lines is currently being established with one of the schools.

4.4 Targets

The travel plan targets for each school are set initially by agreement between the school and Council. These are reviewed annually once the plan has been adopted by the monitoring group. For the first year of operation, the suggested guideline baseline targets are:

- That numbers of children travelling to and from school by car are reduced by 10 per cent for the first year and by 5 per cent for the following five years.
- That numbers of children cycling or walking to school is increased by a total of 10 per cent for the first year and 5 per cent for the following five years
- That the amount of road safety information to parents concerning school issues is increased
- That there is an increase in the number of road safety programmes
- That there is an increase in the awareness of the "Travelwise to School" programme

All of the schools are reviewed annually, but programmes are being established to ensure that some monitoring takes place each term. To achieve this, a "hands-up" survey is undertaken within each classroom each term for a week. This takes up about 3 minutes a day with Council collating the results, so it is not an onerous task for the schools involved. This has a dual effect of giving the school some feedback on progress but also ensuring that the principles of the programme are maintained as a topic within the school on a regular basis.

The objective of the monitoring is to ensure that progress is being made by the schools to achieve the goals of the travel plan, especially with regard to the reduction in vehicle trips and associated travel behaviour change. It is only by the constant monitoring of the schools that the real value of the programme will be understood.

4.5 Number of schools taking up the School Travel Plan in the North Shore

There are 70 schools within the North Shore City boundaries, comprising 47 primary schools (mostly year 1 to 6 but some year 1 to 8), eight intermediate schools (year 7 to 8), 11 secondary schools (year 9 to 13) and three composite schools (year 1 to 13). In 2003 these schools had 15960 primary students, 5242 intermediate students, 14209 secondary students and 2142 composite students, with a grand total of 37,553 students. The focus in initial years

has been to target primary schools in strategic high vehicle areas. Secondary schools will be the primary focus in 2006, with the objective of undertaking travel plans in 6 of the 11 secondary schools. While this may seem high, all of these schools have road projects close to them and it makes sense to associate the travel plan with these projects.

5.0. Implementation Process

This chapter looks more closely at the school travel plan process, and the lessons to have come out of it so far. The process starts with the development of the concept with the school and follows through to the completion of the plan and the monitoring that is part of the review process. It is not intended to discuss thoroughly the complete process as part of this paper but to highlight the parts of the process that are seen to be critical, as well as highlight the outputs from Travel Pattern surveys that were conducted.

5.1 Process of developing a school travel plan

The development of the school travel plan follows a distinctive process that has been developed in the United Kingdom and further refined in New Zealand. The initial school plans were developed using a nine stage process, but this has now been refined to an eight stage process. The stages are:

5.1.1 Stage One – Initiating Travelwise

The objective is to engage the school, especially the principal, in committing to the programme. Integral to this stage is obtain detailed facts on the school, i.e. addresses of pupils to then create a map of where they live in relation to the school.

5.1.2 Stage Two – Defining Current Travel Patterns

This involves both the students and the parents completing questionnaires on their current travel modes, their preferred travel modes, what the barriers are to changing to a more sustainable mode of travel, and what changes they would like to see implemented. For those parents who drive their children to school, there are also questions about what they do after bringing children to school – do they go home or to work. The later questions are aimed at determining if there is any potential or actual reduction in Vehicle Kilometres Travelled (VKT) as a result of the programme.

5.1.3 Stage Three – Consultation

Consultation with the children, parents and community aims to identify the barriers to changing their travel behaviours. This includes holding a Planning for Real (PfR) day within the school, where the children place small houses on large maps laid out on the floor, and then draw their preferred walking route to school, and place cards on the barriers that prevent them using this route. Active participation is sought from the community at this stage of the process, usually culminating in an open day at the school. The information gathered is collated for the working party to evaluate.

5.1.4 Stage Four – Establish a Working Group

The working party is critical to the process and ideally involves six to eight people; most are from the school but there can also be members from the community, and in many cases an elected member of either Council or the local Community Board. The Travel Planner is the facilitator in this process, with the lead role ideally being taken by one of the Board of Trustees of the school or a senior staff member. This group is crucial in establishing the next stage of the process – the development of the travel plan and ensuring that momentum is maintained.

5.1.5 Stage Five – Develop the School Travel Plan

The working party is responsible for ensuring that all the various elements of the travel plan are brought together into a cohesive travel plan. This will involve consultation with various experts on the suggestions put forward by the school and community for changing travel behaviour, whether they are physical infrastructure changes that are required within the road reserve (footpaths, pedestrian facilities, intersection changes) or educational changes that are needed to encourage people that it “Is OK for their children to walk to school”.

5.1.6 Stage Six – Launch Travel Plan

This is the culmination of the process and has usually been done with some fanfare by the school. It is an opportunity for the school to emphasise to the various stakeholders that they are keen on the plan; that it means something to the school; and that they wish to see a dramatic change in how the children get to school as a result. In many cases in North Shore City, the Mayor, Deputy Mayor or senior Councillor has signed the plan on behalf of the city, giving a commitment to ensure that they will do their best to ensure that the plan is implemented.

5.1.7 Stage Seven – Implementation

For both Council and the school this is the critical phase of the travel plan. In schools where some work has been done quickly and efficiently there has been a good response from the school community and significant change has been achieved. In other schools, where for a variety of reasons (funding etc) the implementation of physical infrastructure has been slow, progress has been likewise. As a result of this inconsistency, Council has established a specific programme to evaluate the recommendations of the school travel plan and ensure that a smooth programme of implementation is possible. This process, which can be carried out parallel to the finalisation of the school travel plan, also ensures that there is a definitive and known time frame for the delivery of the various components of the plan.

5.1.8 Stage Eight – Review and Monitoring Travel Plan

Increasingly travel plan reviews are being carried out in North Shore City, to establish their effectiveness. The original travel plan at Vauxhall School was evaluated and a change in travel behaviour of between 5 to 10 per cent was found, depending on the criteria used. This figure, while somewhat disappointing at first glance, did not reflect the change in behaviour that the school had seen. At the second anniversary of the launching of the Walking School Bus programme in the school, every child walked at least 600 metres to school, with the majority walking to and from home that day. This would simply not have been possible previously and reflected a significant change in attitude within the school.

This is further reinforced by a recent survey at the recently opened (2004) Oteha Valley Primary School. The survey showed that approximately 50 per cent of the students walked to school and the school anticipates that this will rise to 70 per cent when physical walking connections are made between streets in this newly developed area. When this is compared to existing schools where the average of students coming to school by car is 53 per cent, it can be seen that the development of the travel plan is having a beneficial effect.

Monitoring programmes are being developed now for the travel plans that have been launched recently. The methodology will focus on using the “hands up” classroom survey as being the base tool for gathering student’s change in travel methods. In this survey, each class is asked each morning how they came to school and how they are expecting to go home that day. This allows all ages to participate, with the data being gathered either by the teacher of the class or in some instances by senior students. Once the class is trained, the process takes about three minutes per day or 15 minutes per week. The objective is to undertake these surveys on week three of each term, and for the travel planner to collate the information for the school and provide the feedback on progress. Where used at the present time, this process has proven to be highly successful in delivering good quality information.

More detailed surveys of parents will be developed and will be used strategically to ascertain the level of parental change in travel behaviour and more importantly try and gauge the change in the level of vehicle kilometres travelled as a measure of travel behaviour change. This final measure is seen as important in determining the future value of the programme and what level of priority should be placed on TBhC programmes in comparison to other expenditure on transport.

6.0 Survey results, barriers and successes

This chapter focuses on the results of surveys that have been conducted to date, the value of the data and what conclusions can be reached from the information. As the majority of the schools with developed School Travel Plans are primary schools, the focus of the data is on that group (year 1 to 6 or ages 5 to 10). Two intermediate schools (year 7 to 8 or ages 11 to 12) have travel plans and their data is commented on separately, as it gives a different perspective to travel for these students. The chapter also discusses the barriers that have been encountered, how they have been overcome, and the successes that have been achieved.

6.1 The journey to and from school

Eighteen schools have undertaken the primary school survey process, with a potential audience of approximately 7150 students. Of these approximately 70 per cent of the students filled out their own questionnaires, with the remainder (mainly year 1 and 2 or 5 to 6 years old) being assisted in filling out their surveys. As part of the programme, students were asked how they came to school each day for a week, mainly using the “hands up” survey methodology. This was in addition to a more detailed survey that looked at other factors such as the barriers to changing their travel behaviour.

6.1.1 How primary school students come to and from school at present

Of the students, over 65 per cent came to school in a car each morning, with 57 per cent using cars in the afternoon. Seventy six per cent of students made at least one trip in a car each week, but more disturbingly over 53 per cent of students were delivered to and taken from school each and every day of the week. What is of greater interest is that approximately 70 per cent of all students live within 1 kilometre of the school, yet a significant portion are driven to school as a matter of course by their parents or caregivers. The detail of the summary is contained in Appendix 2.

6.1.2 The potential change in behaviour

Of greater interest is the potential change in behaviour that is gathered as part of the more detailed survey the students complete. This survey shows that while significant numbers of children are driven to school, their preference is to take almost any other mode of travel. The following table shows the change that the students themselves want:

Mode of transport to school	Now	%	Preferred	%
Car	3660	63%	1546	29%
Walk	1809	31%	1322	25%
Bike	88	2%	1300	24%
Bus	205	4%	609	11%
Scooter	62	1%	602	11%
TOTAL	5824		5379	

While the use of the car is still the single most preferred mode of transport (down from 63% to 29%), the more sustainable modes of transport have a greater preference amongst the

students. It is this preference of alternative modes of transport that is being targeted to ensure that students have a choice over their mode of travel.

6.1.3 How intermediate school students come to and from school at present

Of the 1776 Intermediate students who completed their questionnaire at the start of the programme, 49 per cent came to school by car in the morning yet only 24 per cent returned by car in the afternoon. This showed a significant change in the journey home and poses the question – why the significant difference? Why is it necessary to drive the children to school but all right for them to walk home in the afternoon? While the answer to that question has not been definitive, many of the answers given anecdotally are that they “drop their children off on the way to work”. While this may be the case, it highlights the need for further research in this area, especially as this potentially influences the mode of travel to work for the parent. For example, if they have dropped their child off at school on their way to work, they are committed to a car journey and have forgone the opportunity to travel by public transport or car share. This has a wider implication, which could potentially impact on overall traffic volumes, not just those around schools.

6.1.3 The parental influence

The major challenge with the programme is to persuade parents to let their child have the freedom to make their own choice of travel. While it is generally accepted that in the early school years (years 1 and 2 or ages 5 and 6) parental involvement in the journey to school is accepted and in many schools welcomed, this should not be seen as needing to be in a car. Safety is the most quoted reason for children not walking to school. In some cases there are physical barriers to the safe journey for any pedestrian, let alone a child. These will include the lack of pedestrian facilities across busy roads, lack of footpaths and other facilities that make the walking journey safer. Our assessment of these concerns shows that some are correct and there is the lack of good quality facilities, that traffic has doubled or more on certain streets and this has made the current facilities inadequate and unsafe. In other areas it is felt that the parents’ perception is the barrier and they are not training their children to walk to school. The Walking School Bus programme, where parents accompany a group of children on a structured route to school, has proven to be a great success at increasing the numbers walking to school and also breaking down parents safety concerns.

Distance has been quoted as one of the main reasons for car usage with these parents, but when the journey in many cases is less than a kilometre or a ten-minute walk then there are other more personal issues that are the barrier. The challenge for parents is to know when to reduce the dependence on the car journey and when to encourage walking and other modes of transport, and this is seen as a great opportunity for strong educational programmes to be established.

6.1.4 Changing the behaviour – the active journey benefits

The trend to drive children to school is one of the reasons today’s children are less active than previous generations. On average, NZ children spend almost four hours per week as passengers in a car, only about an hour walking, and less than a quarter of an hour on a bicycle per week. This lack of activity in daily living is part of the reason why over 14 per cent of Auckland children are obese, risking a lifetime of health and social problems.

Children on Walking School Buses walk an average of 1.2 km each way, meaning they are active for around three hours a week, enough to get them out of the “sedentary” category and significantly improve their health. School Travel Plans offer the opportunity to increase independent walking and also cycling, and the use of scooters, skateboards and other active forms of transport – all of which are great for children’s health.

6.2 Successes and barriers

The programme has had both bouquets and detractors but overall, if the growth of the programme is a measure of success, then it has been very successful. There are, however, some areas that need specific mention to highlight their importance in the programme.

6.2.1 Successes

A number of successes can be attributed to the project. For example, the numbers of Walking School Buses (WSB's) have increased from 25 with 250 children in June 2003 to 55 with 750 children in June 2005. Not all of these can be directly attributed to the Travelwise programme, as some schools not within the programme have started WSB's, but many have started as a result of the programme. While there is no empirical evidence to support this, the anecdotal evidence shows the mental and physical health of students involved with WSB's has improved markedly. Students are more alert in the classroom, are physically fitter and would appear to be improving in comparison to their peers.

The "hands up" survey has been found to be an excellent tool to continue to bring awareness of the Travelwise programme to the school and pupils. Classes have found that competitions have grown within the week of survey of "who is walking to school" and have come up with some excellent results, with anecdotal evidence showing some of the behaviour change becoming permanent. This became apparent during the development of the two Intermediate schools programmes. In these schools some "E-classes" (classes using networked computers as a learning tool) used a Geographical Information System (GIS) mapping tool as part of the teaching programme included in the Travelwise project. These students used this tool to a greater extent than envisaged, with students starting to learn where their peers lived, how they could join together to walk to school, and in many cases change their mode of travel. This learning has been further developed with the GIS programme being extended into secondary schools as part of the curriculum.

There has been considerable success involving local politicians as part of the Travelwise programme. They have in many cases been the drivers for change and have been instrumental in ensuring the programmes are being completed within a reasonable time frame.

6.2.2 Barriers

The one major barrier that has been encountered is the reluctant principal. In the initial stages of the programme, schools were willing to participate enthusiastically in the programme to ensure they gained safety and other benefits for their school. A policy was developed for assessing schools, which looked at ensuring among other things that the principal was completely behind the project. History has proven that where this has been the case the programme has been completed with far greater ease.

7.0 Conclusion

The development of School Travel Plans under the Travelwise banner has proven to be successful in North Shore City. To date over 20 schools have completed plans with many heading into the implementation phase of the programme, with updated physical infrastructure required in many cases. Until this phase of the programme is complete, detailed evaluation will not be possible, but already in many schools there has been a change in travel behaviour with a reduction in car usage and an increase in walking. The change in walking is evident in the development of Walking School Buses within the City, which have gone from a zero base in 2002 to over 54 routes involving 19 schools, 768 students and the average daily reduction of approximately 430 cars at these school gates. While this growth cannot all be attributed to the Travelwise programme, 13 of the 19 schools have completed travel plans and contribute strongly to the programme.

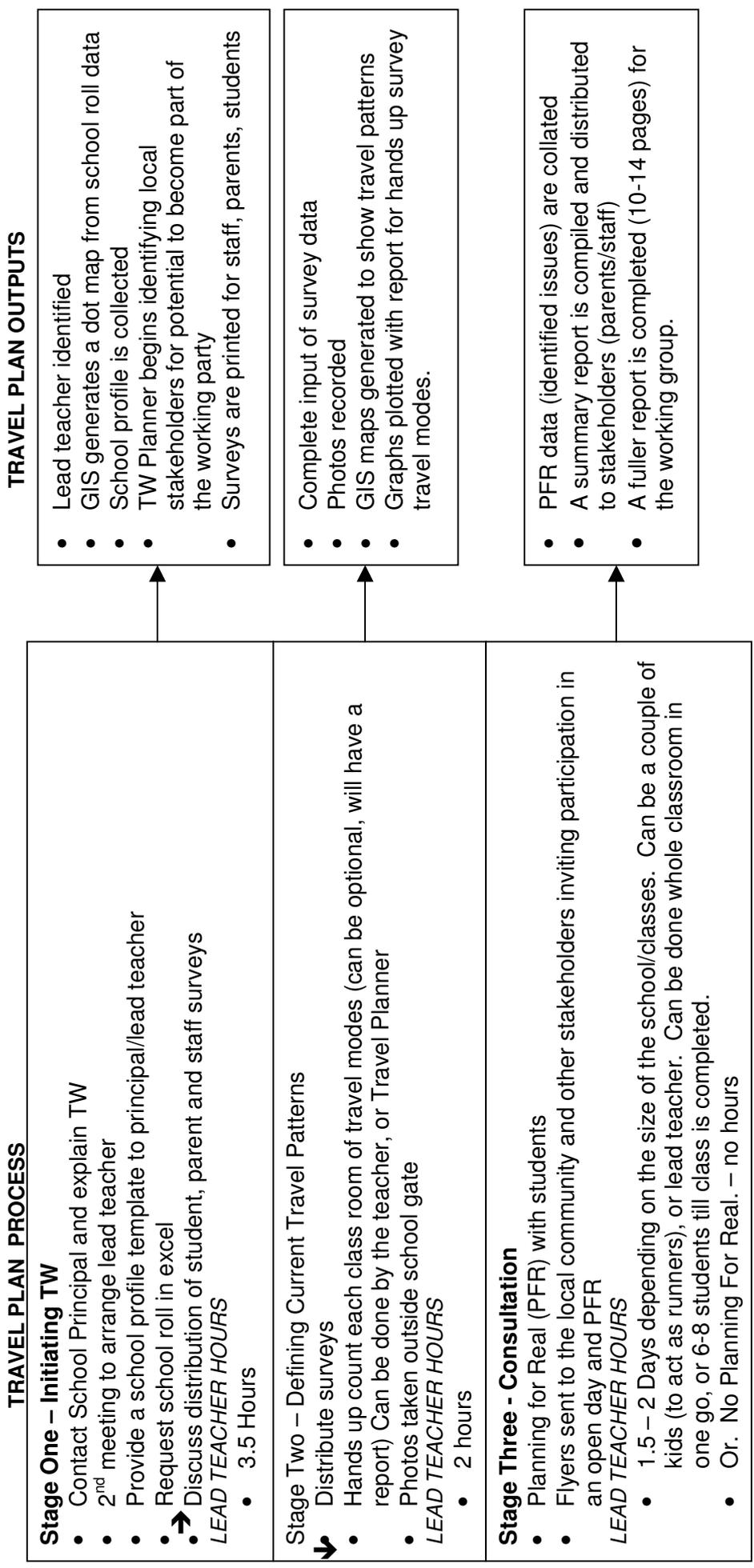
It is anticipated that as more infrastructure gets implemented around the schools and the barriers to walking become less, that the target of a 10% reduction in cars at the school gate will be achieved in the first year of operation if each travel plan.

8.0 References

- 1 Statistics New Zealand (2001) Census Data. Website www.statsnz.govt.nz
 - 2 Local Government Act (2002) Website www.legislation.govt.nz
 - 3 LTSA (2003) Web site www.ltsa.govt.nz
 - 4 Ministry of Transport (2003) Web site <http://www.transport.govt.nz/index.shtm>
 - 5 Auckland Regional Council (2003) Website Auckland
 - 6 North Shore City Council District Plan website www.northshorecity.govt.nz
 - 7 North Shore City Council City Blueprint website www.northshorecity.govt.nz
 - 8 North Shore City Council Cycling Strategy website www.northshorecity.govt.nz
- Unpublished reports from North Shore City Council



PRIMARY SCHOOL



Stage Four – Establish a

Working Group

- The group will consist of 6-8 people / stakeholders
- TP can facilitate meetings, or another nominated group member

LEAD TEACHER HOURS

- Approx 10-12 hours for: admin for setting up working group, newsletters and attending meetings (Principal needed for the working party meetings)

- All information collected thus far i.e. – reports, GIS maps, profiles etc to be collated and discussed
- Progress with further meetings to produce a draft plan

Stage Five – Develop the School Travel Plan

- **A draft travel plan is produced**

LEAD TEACHER HOURS

- **1 – 2 hours – lead teacher and Principal to meet engineers and community board member**

- Draft plan is distributed widely to all stakeholders also including transport planners, traffic engineers and Parks
- A final plan is completed

Stage Six – Launch Travel Plan

- **Done by arrangement with the school**

LEAD TEACHER HOURS

- **3 hours**

- **Mayor in Attendance**
- **Media Coverage**

Stage Seven – Implementation

- **Three main elements from travel plan might be – engineering, education and enforcement**

LEAD TEACHER HOURS

This stage is effectively the beginning of a new phase of the TravelWise programme, requiring time (usually from the lead teacher/principal) to assist with developing any education awareness activities/campaigns

- **Hours not properly established yet, but it envisaged that with ongoing commitment from the school it could be an average of 1 hour a week for the beginning months.**

- **Engineering/infrastructure improvements will be assessed by traffic engineers and traffic planners. A budget will be scoped for funding**

Stage Eight – Review and Monitoring Travel Plan

- **Done by arrangement with the school**

LEAD TEACHER HOURS

- **3 hours per term for collation of results**

- **Feedback to Council / ARTA for review and input into regional database**
- **Feedback to national funding agencies of programme**

Appendix 2 - Analysis of Travelwise Schools and how children get to and from school November 2004

PRIMARY SCHOOLS	July 2003 School roll	Number of students who completed their own form *	Average number who came by car in		Average number that came by car in		Number of children who made at least one trip a week by car		Number of children who made 10 trips a week by car		Households within 1 km of school	Students within 1 km	Percentage of students living with 1 km of school	
			mornings	afternoons	mornings	afternoons	Raw data	Adjusted data						
Albany Primary	515	360	273	76%	230	64%	302	84%	199	323	63%	111	139	27%
Birkdale Primary	301	107	52	49%	43	40%	68	63%	33	188	63%	233	291	97%
Birkenhead Primary	351	309	214	69%	188	61%	269	87%	125	159	45%	181	226	64%
Campbells Bay Primary	672	477	323	68%	272	57%	386	81%	209	365	54%	372	465	69%
Devonport Primary	290	183	76	41%	71	39%	123	67%	30	116	40%	199	249	86%
Glamorgan Primary	593	327	210	64%	179	55%	255	78%	129	342	58%	425	531	90%
Glenfield Primary	455	323	191	59%	170	53%	226	70%	138	244	54%	279	349	77%
Greenhithe Primary	392	218	131	60%	121	56%	157	72%	96	235	60%	236	295	75%
Long Bay Primary	290	232	164	71%	147	63%	188	81%	125	171	59%	191	239	82%
Mairangi Bay Primary	346	312	217	70%	212	68%	255	82%	169	196	57%	188	235	68%
Manuka Primary	334	241	123	51%	100	41%	150	62%	74	148	44%	232	290	87%
Murrays Bay Primary	562	471	246	52%	232	49%	336	71%	145	218	39%	405	506	90%
Oteha Valley Primary	35	35	22	64%	19	55%	26	74%	15	15	43%	20	25	71%
Pinehill Primary	579	426	311	73%	262	62%	345	81%	219	341	59%	239	299	52%
Sherwood Primary (2)	396	258	237	64%	211	57%	170	66%	112	222	56%	261	326	82%
St Mary's School	437	266	194	73%	147	55%	221	83%	108	245	56%	70	88	20%
Target Rd Primary	403	291	154	53%	147	50%	182	62%	115	205	51%	244	305	76%
Verran Primary	199	178	104	58%	90	51%	128	72%	67	84	42%	107	134	67%
Total	7150	5014	3242	65%	2841	57%	3787	76%	2108	3817	53%	3993	4991	70%