



Background



- Idea for Thesis topic
 - Parking required for new school
- Objectives of Study
 - Identify mode choice of primary school pupils
 - Factors which influence choice













Study Process



- School Selection
 - Socio Economic (2 schools from each decile)
 - School Size (30 pupils to 600 pupils)
 - School Age
 - Neighbourhood types
 - Highly pedestrian connected
 - Large number cul de sacs (little connectivity)
 - Specific reasons (cover later)







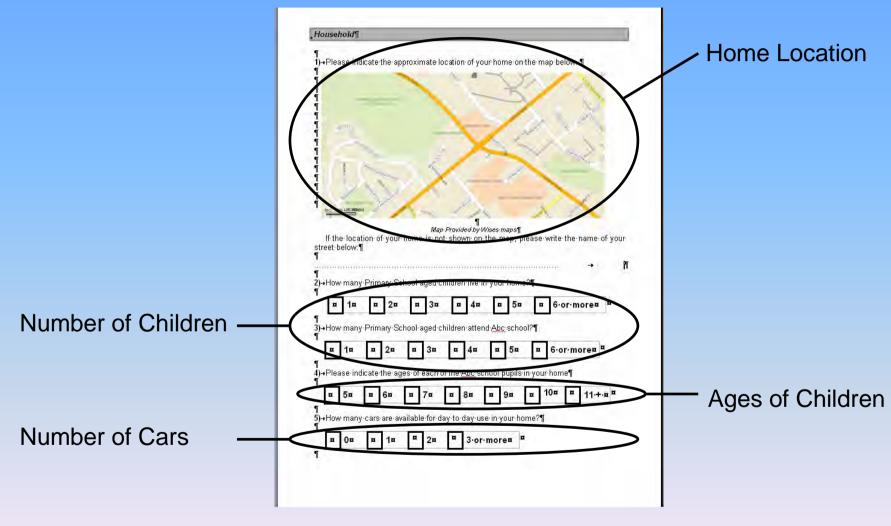








Parents Survey



















Parents Survey

 $Appendix\, B$

Travel Survey Ahc School

School Pupil Travel Choices

Please indicate on the table below, how each of the Abc School pupils in your home travel to and from school in a typical week.

In the example column below two pupils got dropped off at school on the way to work, one caught a bus home, and one walked home with other pupils.

		Example		Mon		Tues		Wed		Thurs		Fri	
		Το	From	το	From	υL	From	To	From	οŢ	From	To	From
Car	As part of another trip (eg to or from work)	2											
_ =	As a special trip to school												
8	On a dedicated school bus												
Bus	On a scheduled public bus service		1										
	With a parent or caregiver												
Bike	With other school pupils												
	Alone												
s	With a parent or caregiver												
Scooter	With other school pupils												
er	Alone												
	With a parent or caregiver												
Walking	In an organised group (eg walking school bus)												
ƙing	With other school pupils		1										
	Alone												















Parents Survey

Аррепаск 1

Travel Survey Abc School

Factors Influencing Travel Choices

Please indicate the importance you place on the following factors when deciding how your children travel to school. O indicates that the factor is not important at all. 5 <u>indicates</u> that the factor is of critical importance.

+	Not Im		Very Imp				
	0		1	2	3	4	5
Distance to school		T					
Weather Conditions							
Convenience							
Safety – "Stranger Danger"							
Safety – Road safety							
Cost							
Exercise is healthy							
Condition of footpaths		T					
Pleasant walking or cycling environment							
Other Factors (Please List)							
		+					
		\dagger					
If you would be willing to be in				e trav	el ch	oices	ofy
here . , and write your conta	act details b	elov	W				
Name							
Address							



















- 34% response rate
- 2300 pupils
- 20,000 trips









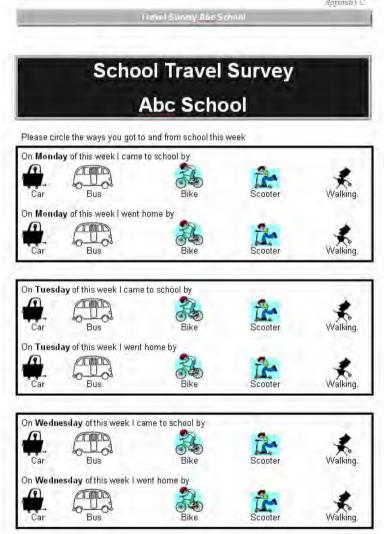






Pupils Survey























- Possible bias in Parent Survey
- Completed by all pupils during class
- Confirm possible small bias Parent Survey













Neighbourhood Survey



School neighbourhood divided into 8 segments







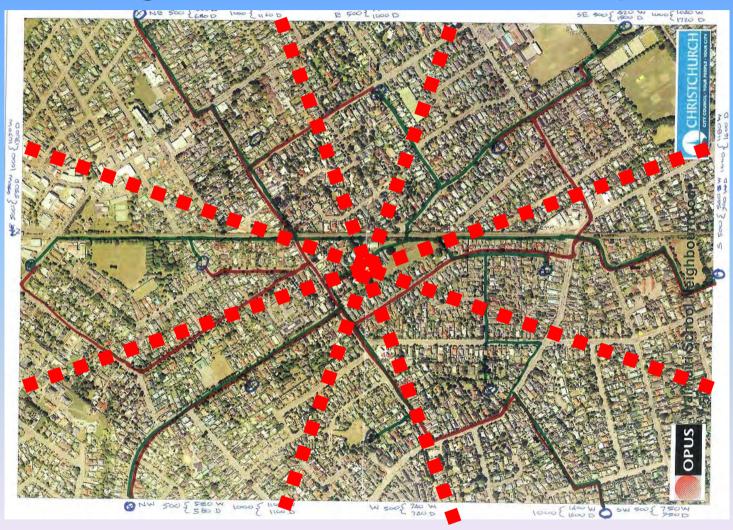






Neighbourhood Survey UNIVERSITY OF CANTERBURY Te Whater Wanding o Waitaha CHRISTCHURCH NEW ZEALAND



















Neighbourhood Survey



- School neighbourhood divided into 8 segments
- Each segment surveyed for 1km from school













Neighbourhood Survey CANTERBURY To Whater Wananga o Waitaha CHRISTCHURCH NEW ZEALAND



Walkability A	Assessme	ent								Appena
School:			Se	ector:	D	ate:	Weatl			
Category	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	800-900	900- 1000
Width										
Surface Quality										
Obstructions										
Crossing Opportunities										
Support Facilities										
Path Environment										
Conflict Points										
Personal Security										













Hazards















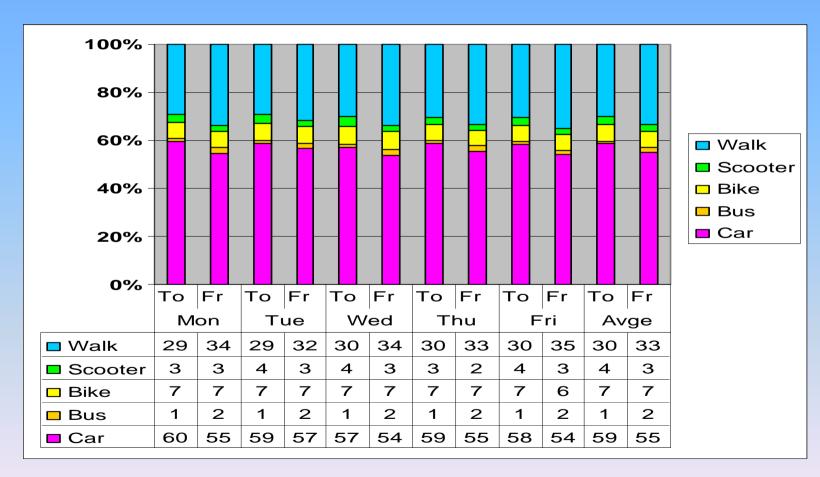




Study Results



Overall Results















School Roll



- Clear Correlation
 - Increased roll Increased car use
- As Expected
 - Greater proportion large school live further away













Decile



- Not Clear Cut
 - Very low & very high decile lowest car use
 - Variable in middle
 - Some variability explained by other factors
- Not Expected













Pedestrian Environment



- No apparent logical correlation
 - Increased pedestrian rating Increased car usage?
- Other factors more important













Pedestrian Distance



- Clear Correlation
 - Increased distance Increased car usage
- As Expected













Major Roads to Cross



- Less than 1km from school
- Clear Correlation
 - Increased major roads to cross Increased car usage
- Expected













Major Roads to Cross



- Less Expected.....
 - Reduction Parents walking with Children
 - Parents uncomfortable crossing road took car













School Travel Plan



- 1 School
 - Decile 10
 - Travel Plan 3 years ago
 - Funding employ part time travel co-ordinator







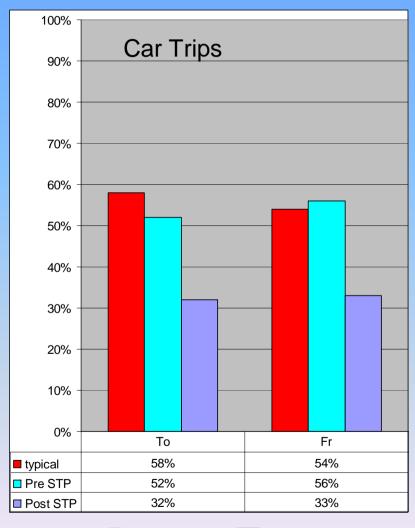






















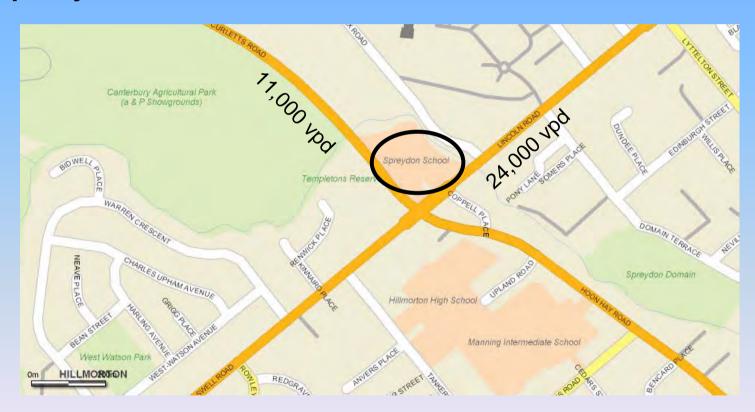




Specific Schools



Spreydon School











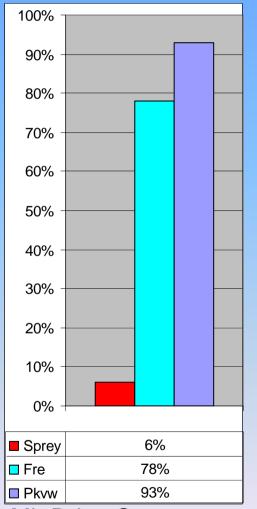


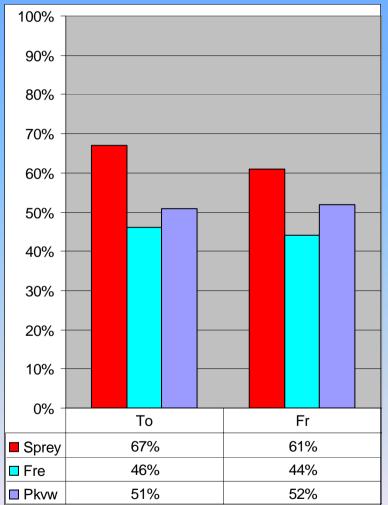






Spreydon School





No Mjr Rd to Cross











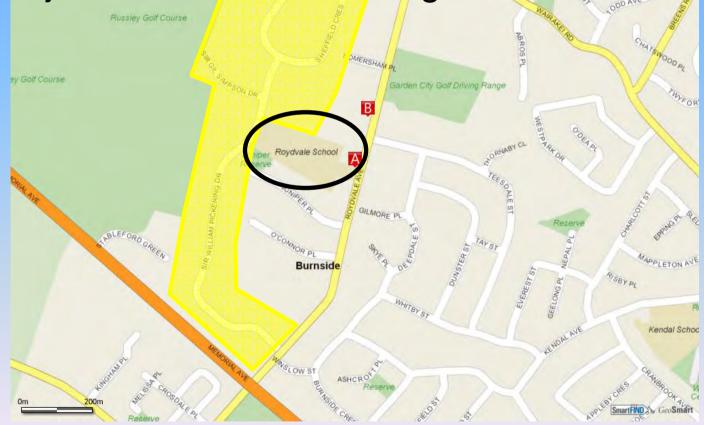


Specific Schools



Roydvale School:

Adjacent William Pickering Business Park









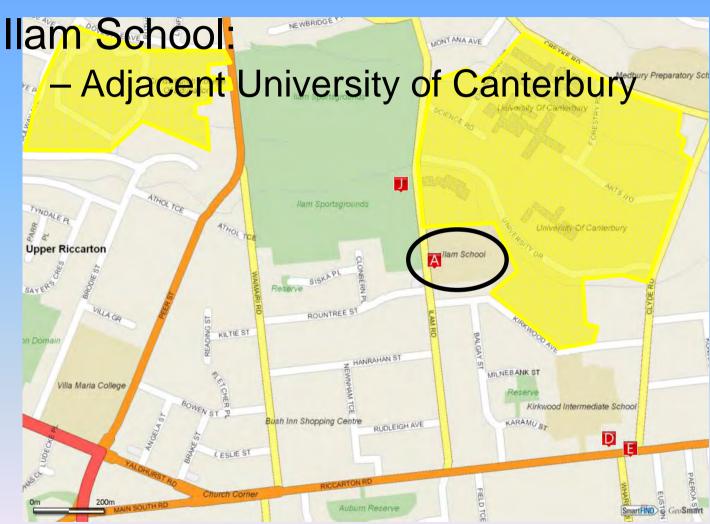


















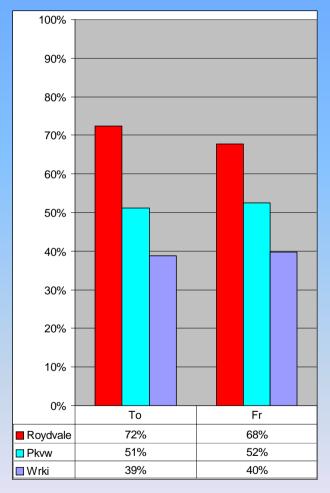






Employment Proximity





100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% То Fr 55% 51% Ilam 72% 68% ■ Wnds 56% Avdle

Roydvale

llam















Importance of Factors



(out of 5)

3.9

3.4

3.3

3.2

2.9

1.6

- Safety Road
- Safety Stranger
- Exercise is Healthy
- Distance
- Weather
- Convenience
- Pleasant Env
- Condition Footpaths 2.2
- Cost

- 4.5 Other Factors
- 4.2 Time
 - Child Age
 - Environmental
 - Location













Conclusions



- Family travel choices complex decision
 - Safety Critical
 - Perception of safety important

Social solutions to engineering issues













Recommendations



- Transportation Issues considered early in school location
 - Geographic size of catchment
 - Pedestrian connectivity
 - Ability to provide safe routes to school
- And "Rationalising" schools















Questions / Discussion









