



Active Streets Pilot Summary Report

November 2017

Initiative of



ACT
Government

Active
STREETS

ACTIVE STREETS PILOT PROGRAM RESULTS: OVERVIEW

This overview was developed using information contained within the Draft Active Streets Pilot Evaluation Report prepared by the University of New South Wales and additional information and analysis from ACT Health and Transport Canberra and City Services.

Active Streets is an ACT Government program that aims to address parental safety concerns by making the environment around schools safer for children to ride, walk, scooter or skate to, and from, school. It extends ACT Health's Ride or Walk to School Program (RWTS, launched in 2012) which builds the capacity of schools to teach and encourage active travel.

Active Streets is a cross-government collaboration being led by Transport Canberra and City Services (TCCS), in partnership with ACT Health, the Justice and Community Safety Directorate, the ACT Education Directorate, along with school communities. Active Streets forms part of the ACT Government's Healthy Weight Initiative, which aims to support the community to be healthy by creating environments where making healthy lifestyle choices is easier.

KEY RESULTS

Results from the pilot program indicate that the interventions are showing early signs of success in increasing active travel and reducing the volume and speed of traffic around schools:

- ✓ There was a consistently high degree of support for active travel amongst parents.
- ✓ There were small but consistent reductions of 3% in both average traffic speeds and average daily traffic volume around pilot schools from May 2015 to November 2016.
- ✓ Overall the percentage of students across all pilot schools using active travel to and from school was higher following the implementation of Active Streets interventions.
- ✓ The ratio of children to parents travelling actively on the peak observation day increased from 2.3 in May 2015 to 2.5 in November 2016, suggesting increased independent active travel in pilot schools.



THE ACTIVE STREETS PILOT PROGRAM

The Active Streets pilot was conducted in four of the ACT Government primary schools that were already participating in the RWTS program. The pilot incorporates a number of essential elements of interventions that research shows are likely to be effective in increasing active travel. These include addressing barriers such as infrastructure/safety changes and promoting part-way drop-off points and safe routes to school.

Each pilot school received a different combination of infrastructure changes to its surroundings and travel routes (Table 1). These changes were based on consultations regarding the context and needs of each school. Infrastructure initiatives were installed between November 2015 and May 2016 and included: dragon's teeth (a series of triangular road markings placed in pairs on each side of the road); 30 km/h school speed zone environments and line marked parking; part-way drop off points; children's crossings; stencilling along popular walking paths; and footpath improvements.

Engagement and promotional materials were also distributed at each pilot school during Term 1 2016. These materials and activities aimed to promote children using active travel to and from school and included: school area maps identifying physical infrastructure changes; mapped lesson plans for teachers; student showbags containing 'what to do' cards; 'first one in' and 'last one out' checklists; newsletter articles; and social media images. Analysis of the engagement and promotional materials was not captured as part of this evaluation.

Active Streets infrastructure installed	School				Date installation completed
	1	2	3	4	
Dragon's teeth			✓	✓	November 2015
30km/h zone and line-marked parking	✓	✓			January 2016
Part-way drop-off points, signs and stencils	✓	✓	✓	✓	February 2016
Children's crossings		✓			January 2016
Footpath upgrades				✓	May 2016

Table 1: Infrastructure initiatives installed at Active Streets pilot schools



EVALUATING THE PILOT:

Data was collected in three ways:

1. The level of children using active travel to and from school was measured by counting the number of children riding or walking to and from school on three occasions: May 2015 (pre-intervention), May 2016 (post-intervention) and November 2016 (follow-up). Weather is a known factor affecting rates of active travel, hence numbers were measured over two consecutive days on each occasion, and the peak day used for evaluation. It should be noted that the final cordon counts conducted in November 2016 were collected over two days on which considerable rainfall was recorded. The number of adults accompanying children was also counted to get an indication of the proportion of children who are riding or walking to school independently of an adult.
2. Changes in the traffic speed and volume were measured in one or two streets adjacent to each pilot school over two consecutive weeks in May 2015, May 2016 and November 2016.
3. The input of parents of students with children in Years 3, 4 and 5 was sought through surveys in November 2015, May 2016, and November 2016. Parents from 10 schools were invited to participate, including those at the four pilot schools.

KEY FINDINGS: ACTIVE TRAVEL

It should be noted that the context of each school is quite different and a range of factors can potentially influence the results of the pilot interventions in each school, particularly in such a small sample size. This is reflected in the findings presented by school in Appendix A. These findings reinforce the importance of considering the context and needs of the school when considering which intervention should be applied for future Active Streets schools.

Further to this, behaviour change is a process that occurs over time, thus monitoring of these initiatives is needed over the longer term to determine the enduring benefits of the interventions. Bearing this in mind, it is still useful to analyse the aggregated results of the pilot to identify any trends which may inform the best use of the interventions in the future. Key findings from these aggregated results are presented as follows:

- More children use active travel from school, than on the way to school.
- 31% of children enrolled in the pilot schools rode or walked to school on the peak measured day in May 2016, shortly after the Active Streets infrastructure changes were made. This is slightly higher than 26% in May 2015 before the Active Streets infrastructure was installed (Figure 1). The percentage decreased to 28% on a rainy day in November 2016.
- 41% of children enrolled in the pilot schools rode or walked from school on the peak measured day in May 2016, shortly after the Active Streets infrastructure changes were made. This is higher than 36% in May 2015 before the Active Streets infrastructure was installed (Figure 1). The percentage remained at 40% at follow-up in November 2016, despite the rainy weather.
- 71% of parents surveyed reported their year 3, 4 or 5 child travels actively to school at least sometimes.
- The ratio of children to parents travelling actively on the peak observation day increased from 2.3 in May 2015 to 2.5 in November 2016, suggesting increased independent active travel in pilot schools.

ACTIVE TRAVEL TO AND FROM SCHOOL

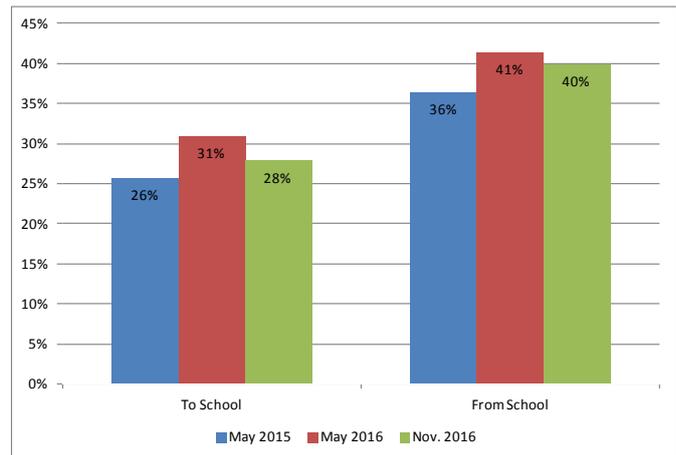


Figure 1: Active travel to and from school as a percentage of all children enrolled in the four Active Streets pilot schools.

KEY FINDINGS: TRAFFIC VOLUME AND SPEED

- There was a 3% reduction in the average daily volume of traffic around all four pilot schools from May 2015 (4,263) to May 2016 (4,138). This reduction was maintained at November 2016 (4,135).
- Overall, traffic speeds reduced around the pilot schools from May 2015 to May and November 2016. Average traffic speeds declined by 3% from 35 km/h in May 2015 to 34 km/h by November 2016 (Figure 2).

AVERAGE TRAFFIC SPEEDS

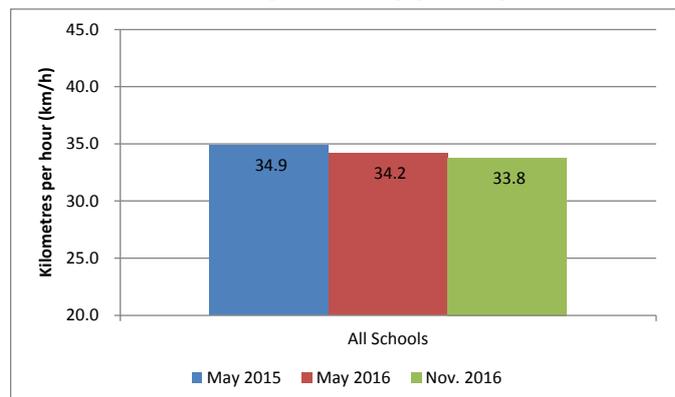


Figure 2: Average daily traffic speed around all Active Streets pilot schools.



COMPARISON OF 30 KM/H AND DRAGON'S TEETH INTERVENTIONS:

The 30 km/h zone and dragon's teeth road markings were identified as potential interventions to be trialled to improve safety and encourage active travel at schools. Schools 1 and 2 received the 30 km/h speed zone and Schools 3 and 4 received the dragon's teeth road marking intervention. Installation of 30 km/h zones or dragon's teeth was decided following consultation with schools and examination of their context. Comparison of these two interventions is provided below:

ACTIVE TRAVEL

- Post-intervention environmental monitoring data collected in the same month (May) as pre-intervention environmental monitoring data is preferable to that collected in November 2016 (where two consecutive days of heavy rain were recorded).
 - The percentage of enrolled children travelling actively to school in the two pilot schools where 30 km/h speed zones were installed increased from 21% in May 2015 to 26% in May 2016, compared to the dragon's teeth intervention where active travel to school increased from 30% in May 2015 to 35% in May 2016 (Figure 3).
 - The percentage of enrolled children travelling actively from school in pilot schools where dragon's teeth were installed increased from 37% in May 2015 to 45% in May 2016, compared to the 30 km/h speed zone where active travel from school increased from 36% in May 2015 to 38% in May 2016 (Figure 4).
- * Results were variable when November 2016 data is included in Figures 3 and 4.

ACTIVE TRAVEL TO SCHOOL

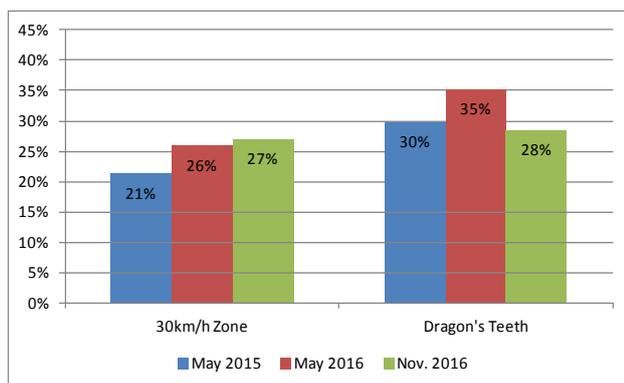


Figure 3. Percentage of enrolled children travelling actively to school in pilot schools where 30 km/h speed zone (School 1 and 2) and dragon's teeth (School 3 and 4) were installed.

ACTIVE TRAVEL FROM SCHOOL

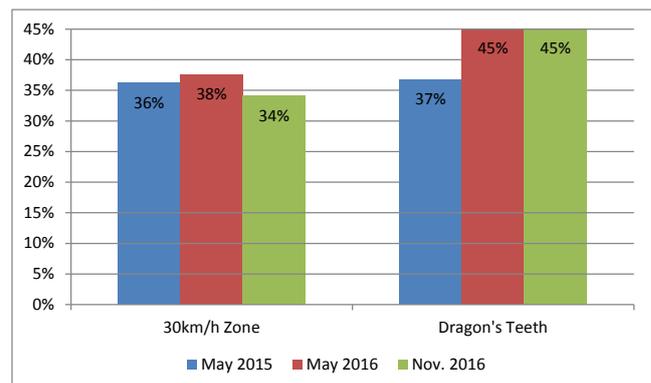
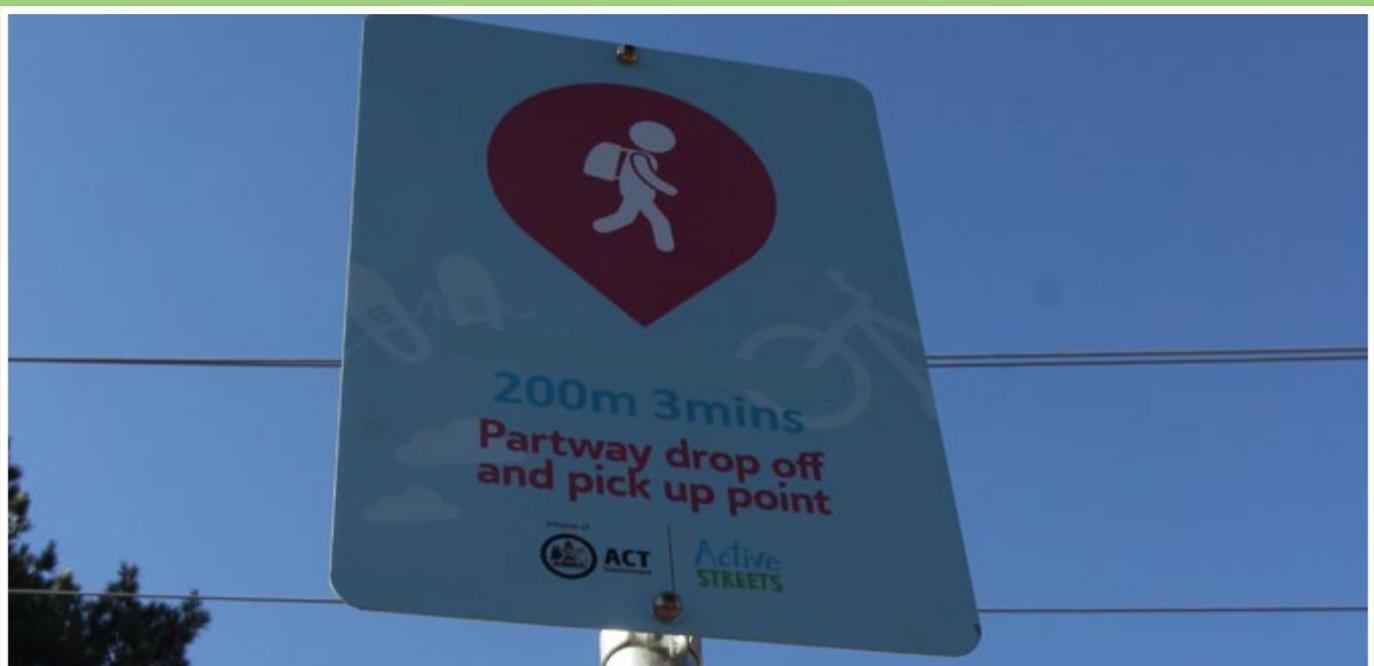


Figure 4. Percentage of enrolled children travelling actively from school in pilot schools where 30 km/h speed zone (School 1 and 2) and dragon's teeth (School 3 and 4) were installed.



COMPARISON OF 30 KM/H AND DRAGON'S TEETH INTERVENTIONS

TRAFFIC VOLUME AND SPEED

- The 30 km/h intervention led to a reduction in average daily traffic speed from 35.5 km/h to 32.0 km/h. Dragon's teeth did not yield a reduction in average daily traffic speed (Figure 5).
- There was a small but consistent decrease in average daily traffic volume around schools after the installation of 30 km/h speed zones from 2,999 in May 2015 to 2,879 in November 2016. Pilot schools where dragon's teeth were installed did not show such a decrease with an average traffic daily traffic volume of 1,264 in May 2015 and 1,256 in November 2016.

TRAFFIC SPEED COMPARISONS

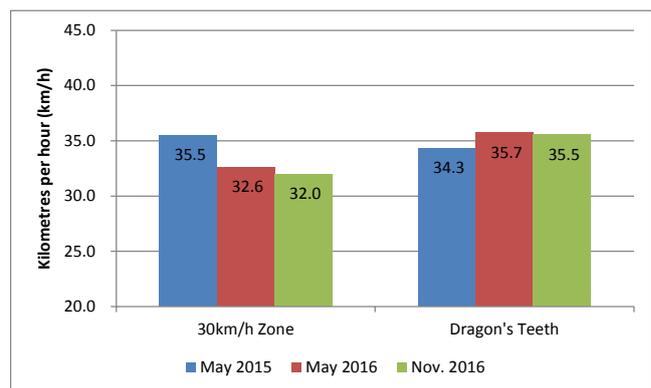
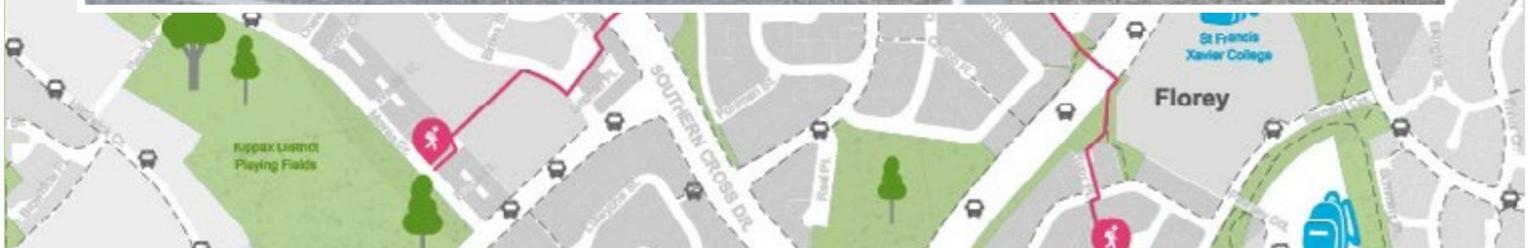


Figure 5: Average daily traffic speeds in pilot schools where 30 km/h zones (Schools 1 and 2) and dragon's teeth (Schools 3 and 4) were installed.

KEY FINDINGS: PARENT SUPPORT FOR ACTIVE TRAVEL

- There was a consistently high degree of support for active travel amongst parents, with 88% of the 603 parents surveyed in May 2015 indicating that they thought independent active travel was important in promoting child health and wellbeing.



APPENDIX A: ACTIVE STREETS PILOT SCHOOL RESULTS

SCHOOL 1

Active Streets infrastructure installed

- ✓ 30 km/h signs installed in all school zones
- ✓ Line-marked parking
- ✓ Part way drop-off points, signs and stencils installed

School overview

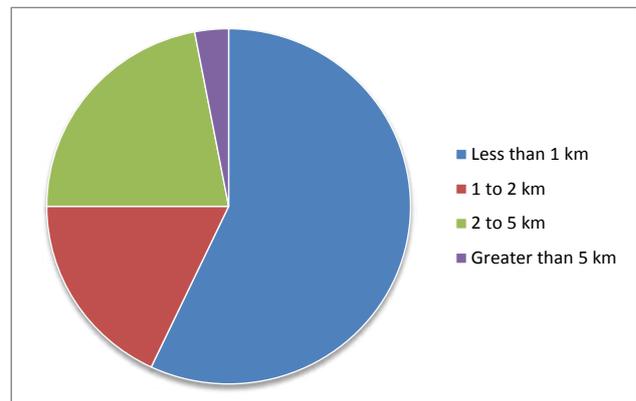
Before the Active Streets pilot program began, of the four Active Streets pilot schools, School 1 had the lowest rates (15%) of student active travel to school.

Twice as many children used active travel from school in the afternoons compared to morning activetravel.

May 2016 showed strong growth in the proportion of children using active travel both mornings (up 7%) and afternoons (up 20%). In November 2016, active travel to school continued (up a further 5%), but there was a decline in active travel after school, likely due to rainy weather on that day.

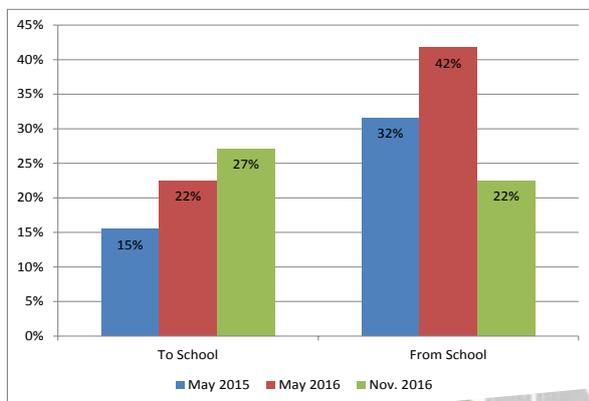
This school had the highest volume of average daily traffic in surrounding streets for all periods measured. The traffic volume was twice or more of the volume found in the other pilot schools. Traffic volume stayed relatively consistent over the period (2,075 May 2015; 2,046 May 2016 and 1,979 November 2016). Average speeds decreased slightly at this school after the installation of the 30 km/h zone.

DISTANCE STUDENTS LIVE FROM SCHOOL



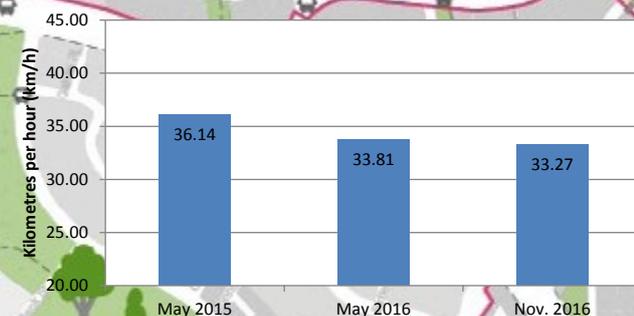
Distance students live from School 1 as a percentage of enrolment.¹

ACTIVE TRAVEL TO AND FROM SCHOOL



Active travel to and from school as a percentage of all children enrolled in School 1.

AVERAGE TRAFFIC SPEEDS



Average traffic speed (km/h) around School 1.



¹ Data provided by ACT Education Directorate for the 2016 school year.

APPENDIX A: ACTIVE STREETS PILOT SCHOOL RESULTS

SCHOOL 2

Active Streets infrastructure installed

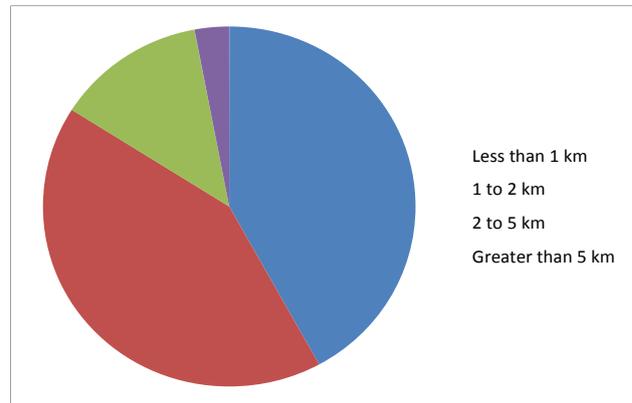
- ✓ 30 km/h signs installed in all school zones
- ✓ A children's crossing was installed
- ✓ Line-marked parking
- ✓ Part-way drop-off points, signs and stencils installed

School overview

Before the Active Streets pilot program began, School 2 had the second highest percentage of children already travelling actively to and from school, possibly due to a high proportion of students living within two kilometres of the school. By May 2016, a small increase in the percentage of children using active travel to school occurred, with a decrease in active travel from school. By November 2016 active travel to school rates remained fairly steady, whereas active travel from school increased. In this school, no clear trend emerges for active travel, beyond the approximate maintenance of the quite high percentages of children travelling actively to and from school recorded prior to the program in May 2015.

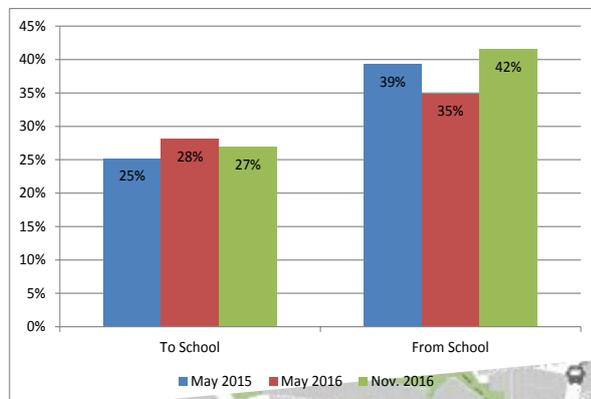
This school had the second highest volume of average daily traffic in surrounding streets for all periods measured. Traffic volumes remained similar over the period (924 May 2015; 920 May 2016 and 900 November 2016), however, average traffic speeds declined noticeably after installation of the 30 km/h zone.

DISTANCE STUDENTS LIVE FROM SCHOOL



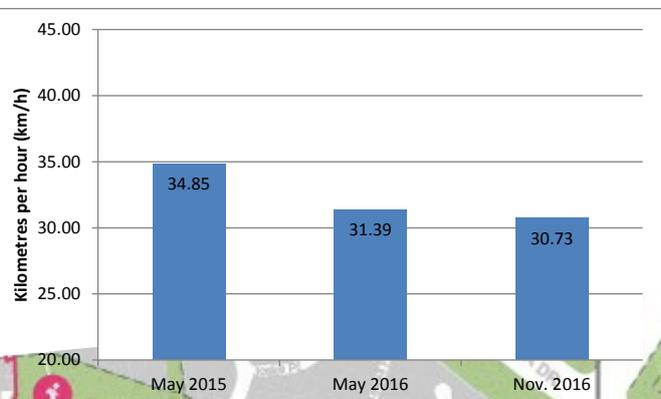
Distance students live from School 2 as a percentage of enrolment.²

ACTIVE TRAVEL TO AND FROM SCHOOL

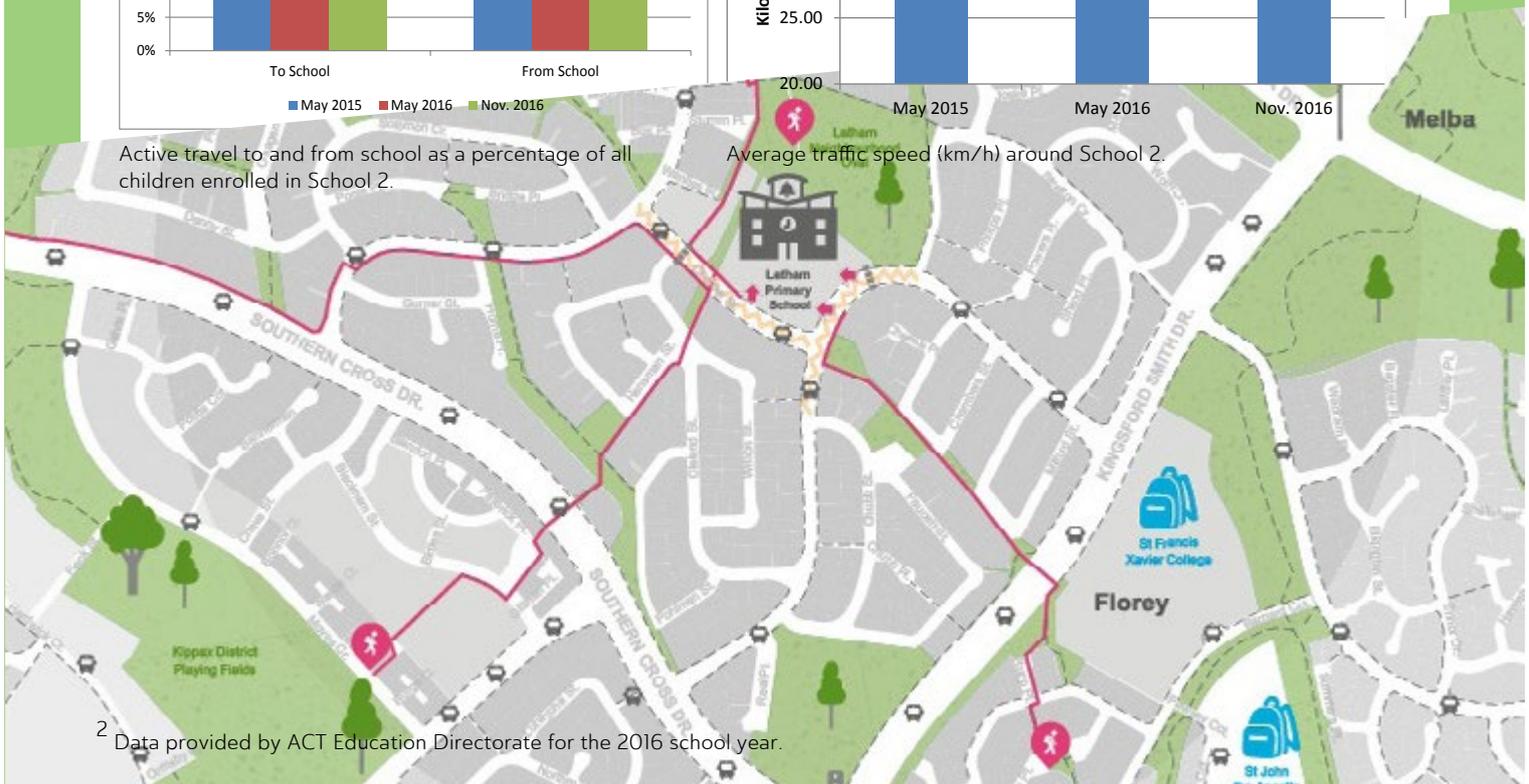


Active travel to and from school as a percentage of all children enrolled in School 2.

AVERAGE TRAFFIC SPEEDS



Average traffic speed (km/h) around School 2.



² Data provided by ACT Education Directorate for the 2016 school year.

APPENDIX A: ACTIVE STREETS PILOT SCHOOL RESULTS

SCHOOL 3

Active Streets infrastructure installed

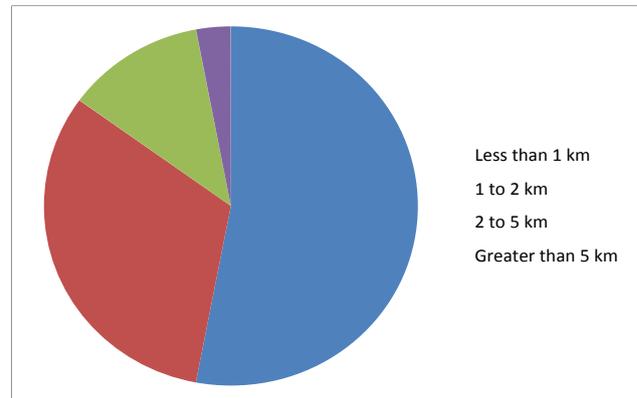
- ✓ Dragon's teeth were installed in four locations on the two streets immediately adjacent to the school
- ✓ Part-way drop-off points, signs and stencils installed

School overview

Before the Active Streets pilot program began, School 3 had reported some pedestrian access issues and also had the highest percentage of children already travelling actively to (38%) and from (46%) school, possibly due to a very high proportion of students living within just 1 km of the school. By May and November 2016 the percentage of children using active travel to school had slightly increased and remained at that level. The percentage of children using active travel from school increased by 8% to May 2016 and then by a further 4% to November 2016. These are good results considering the initial highest rates of active travel already found in this school at baseline.

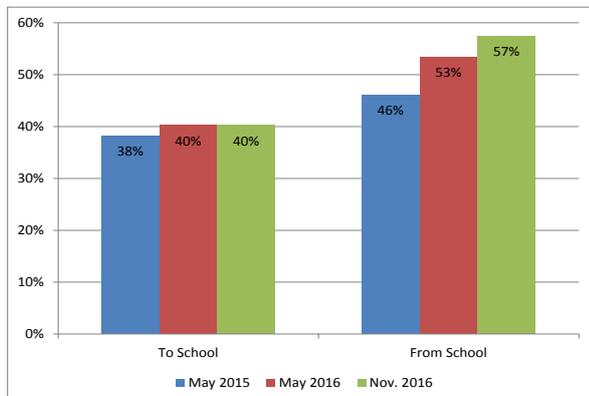
This school had the lowest volume of daily traffic in surrounding streets for all periods measured. Traffic volumes remained similar over the period (562 May 2015; 581 May 2016 and 552 November 2016). Average traffic speeds tended to increase slightly over the period. The proportion of traffic travelling under 40km/h decreased from 90% to 82%.

DISTANCE STUDENTS LIVE FROM SCHOOL



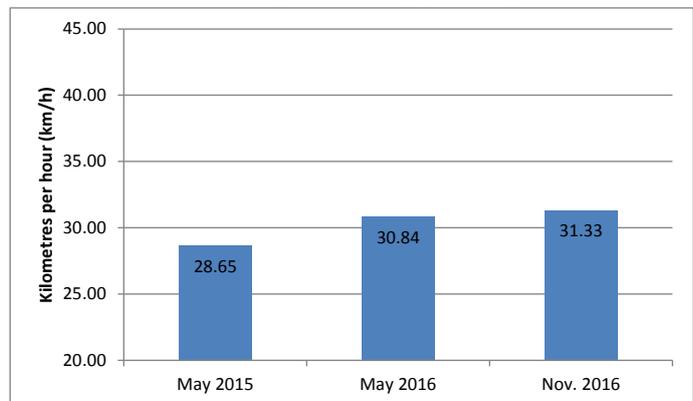
Distance students live from School 3 as a percentage of enrolment.³

ACTIVE TRAVEL TO AND FROM SCHOOL



Active travel to and from school as a percentage of all children enrolled in School 3.

AVERAGE TRAFFIC SPEEDS



Average traffic speed (km/h) around School 3.



³ Data provided by ACT Education Directorate for the 2016 school year.

APPENDIX A: ACTIVE STREETS PILOT SCHOOL RESULTS

SCHOOL 4

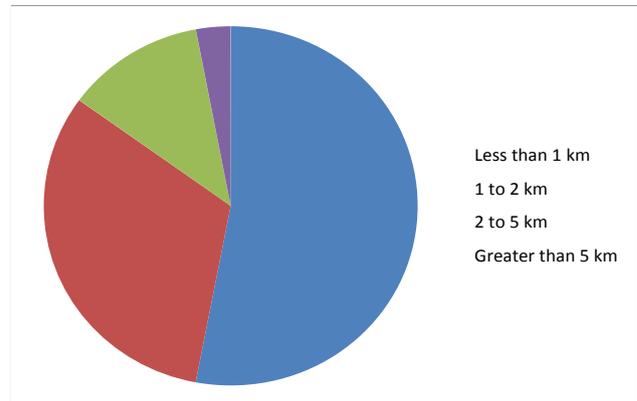
Active Streets infrastructure installed

- ✓ Dragon's teeth were installed in three locations approaching one side of the school
- ✓ Part-way drop-off points, signs and stencils installed
- ✓ Footpath upgrade undertaken

School overview

Before the Active Streets pilot program began, School 4 reported concerns with foot access and road crossing safety. School 4 already had one existing pedestrian crossing in place.

DISTANCE STUDENTS LIVE FROM SCHOOL

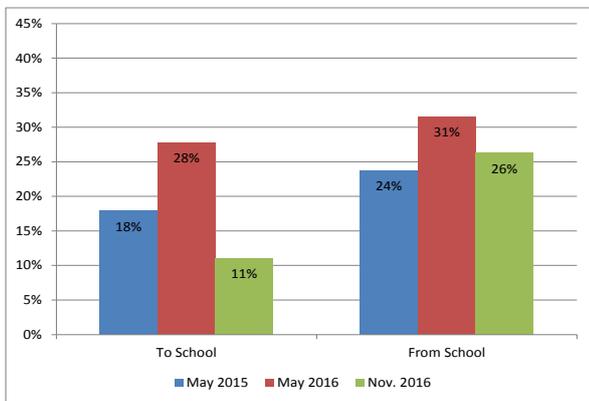


Distance students live from School 4 as a percentage of enrolment.⁴

The active travel rates both to and from school were unusually variable in School 4. Importantly, there was a big increase in the proportion of children using active travel between May 2015 and May 2016, which was also consistent with a reduction of traffic volumes observed over the same period.

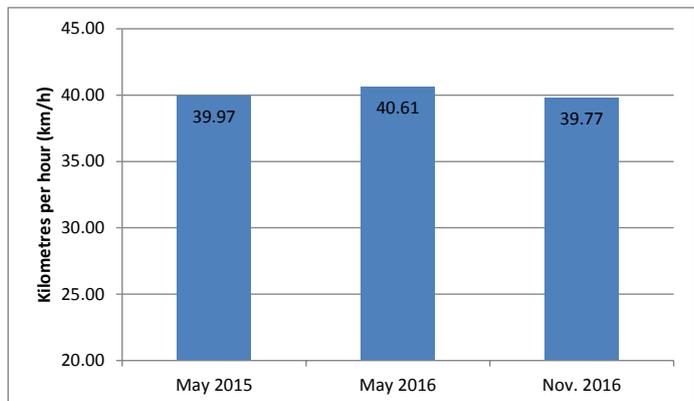
The rainy days in November 2016 likely negatively affected the proportion of children riding or walking to school, and corresponds with the traffic volumes returning to the levels experienced before Active Streets. The overall traffic volumes around this school are the second lowest among the pilot schools and after an initial decline, returned to earlier higher volumes (702 May 2015; 591 May 2016 and 704 November 2016).

ACTIVE TRAVEL TO AND FROM SCHOOL



Active travel to and from school as a percentage of all children enrolled in School 4.

AVERAGE TRAFFIC SPEEDS



Average traffic speed (km/h) around School 4.



⁴ Data provided by ACT Education Directorate for the 2016 school year.



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