GRSP-ZA Conference.13th August 2014

“Seatbelt research and education in greater Pietermaritzburg,S.A.”

Funded by ROAD SAFETY FUND

Presented by Caro Smit

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Alcohol and Drug Educator and Counsellor.

Founder/Director

SOUTH AFRICANS AGAINST DRUNK DRIVING

www.sadd.org.za

Winner of a “Prince Michael of Kent International Award” for the University Project - 2012.

CARS “Road Safety Achievement of the Year Award” – 2006.

Goals of Project

- The Project aim: “To make a demonstrable and sustainable contribution towards the achievement of the goals of the Decade of Action”

- To increase knowledge and awareness of seatbelt use in schools

- To increase the rate of seatbelt wearing, thus improving the safety of drivers and passengers

- To increase enforcement of seatbelt use by engaging with the Dept. of Transport, SAPS and Municipality

- To have accurate up-to-date research data in Pietermaritzburg on seatbelt use

Target audience

- Residents of the greater Pietermaritzburg KwaZulu-Natal.

A city of about

500 000 people

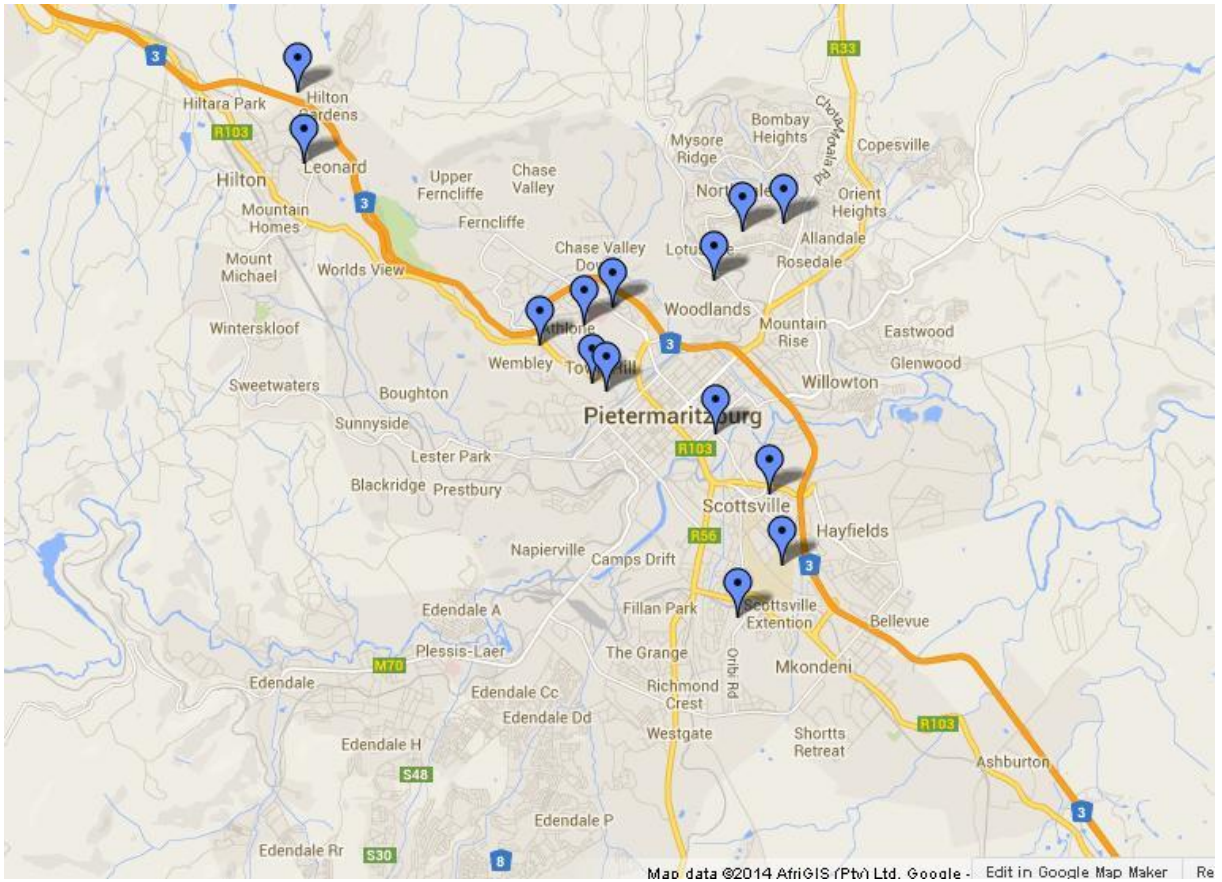
Overall description of activities

- Conduct pre tests on seatbelt use in schools, with the Dept. of Transport and SA Police force
- Develop DVD, posters, stickers & manual
- Do seatbelt education using above materials and the results of the tests .
- Undertake post tests on seatbelt use
- Write up and share research results and the program

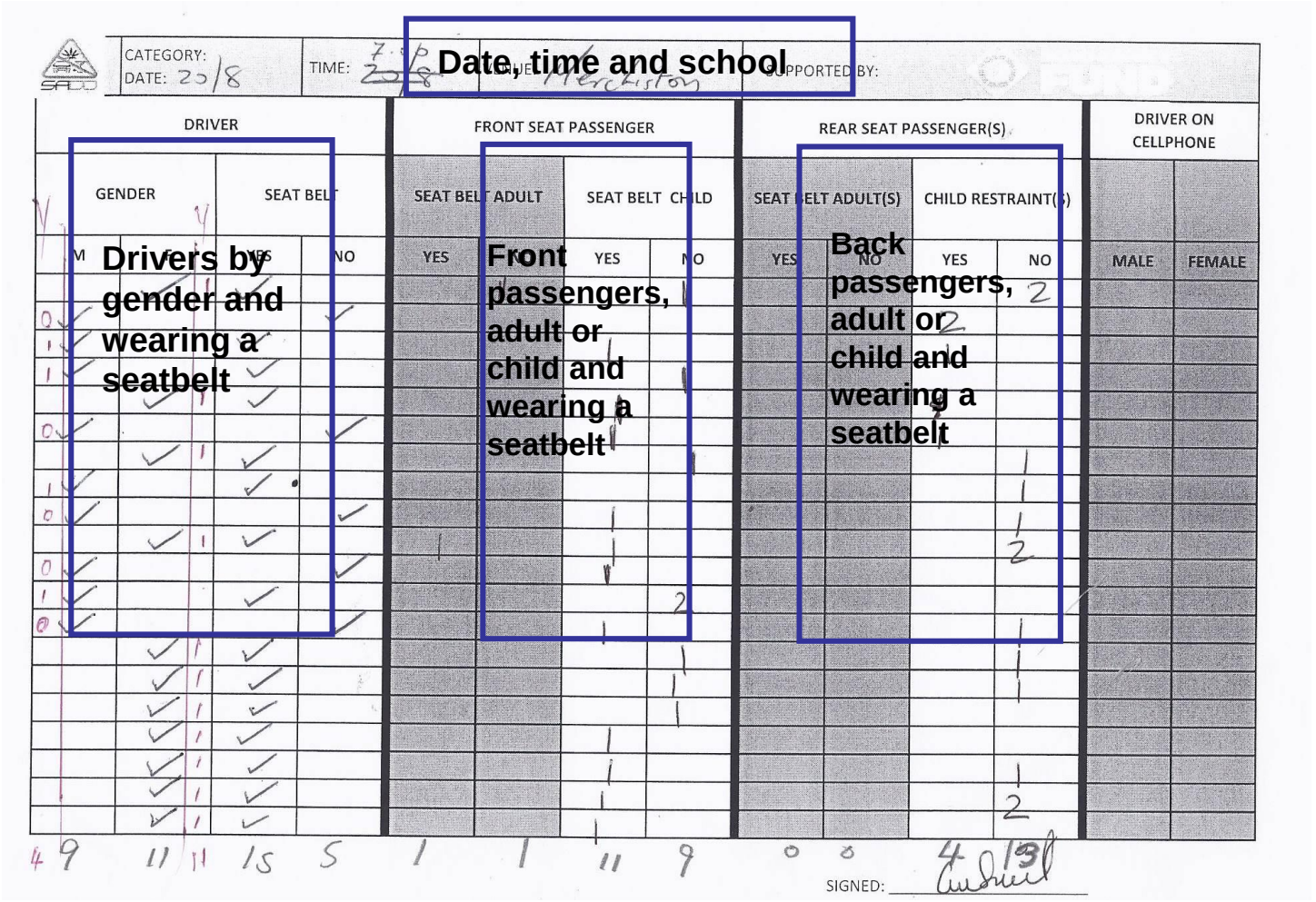
Schools

- A total of 16 schools were selected - of varying socio-economic bases, including independent, model C & government schools.

Map showing school distribution



Recording sheet



Numbers tested-pre and post

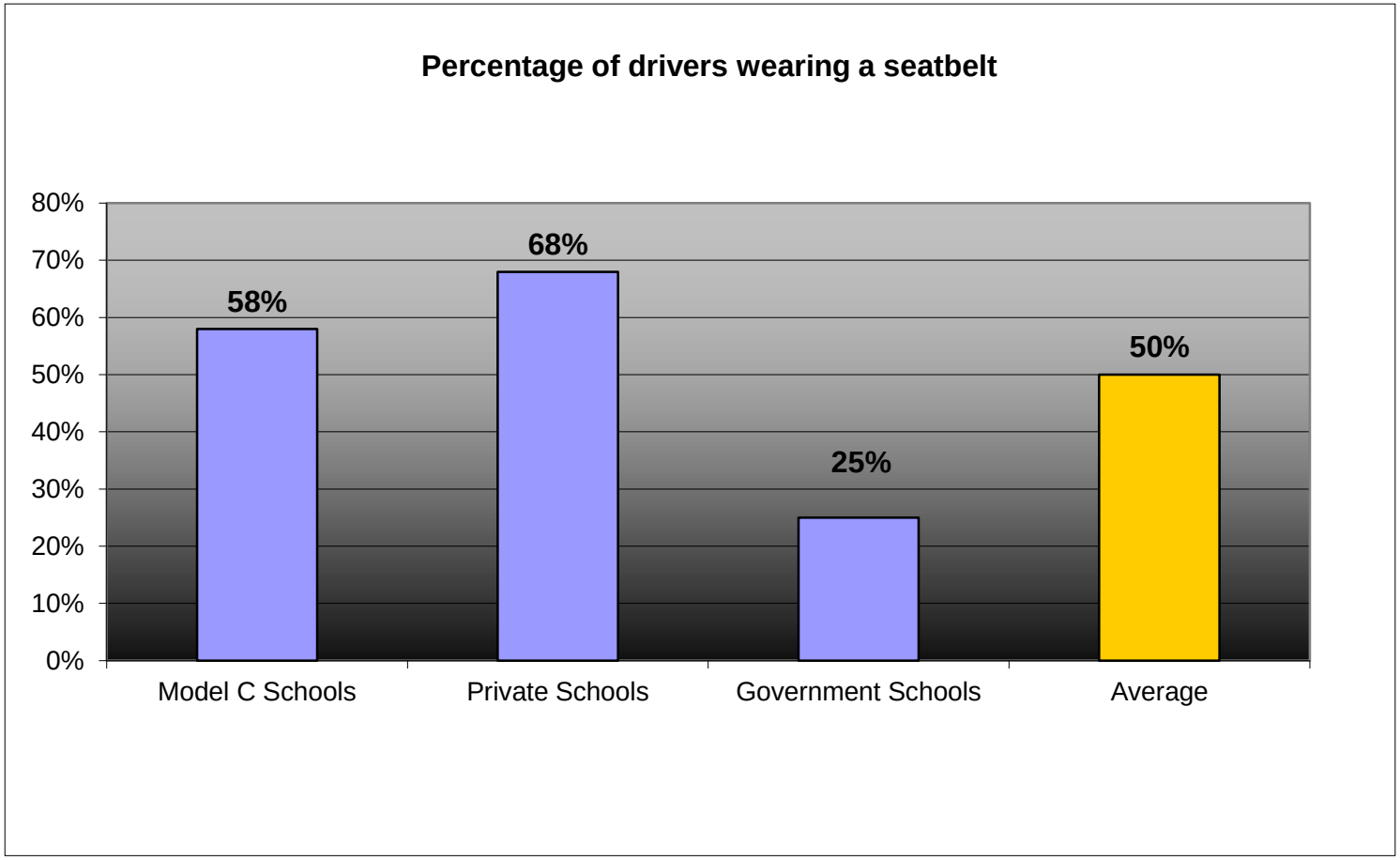
- School vehicles - 3 835
- Front children - 3 245
- Back children - 2 672 (not in Taxis)
- Transport Dept. - 103 (Pre)
- SAPS- 5 stations - 100 SAPS (Pre)
- Municipality Police- 17 vehicles (Pre)

Total = 4 055 vehicles

Difficulties

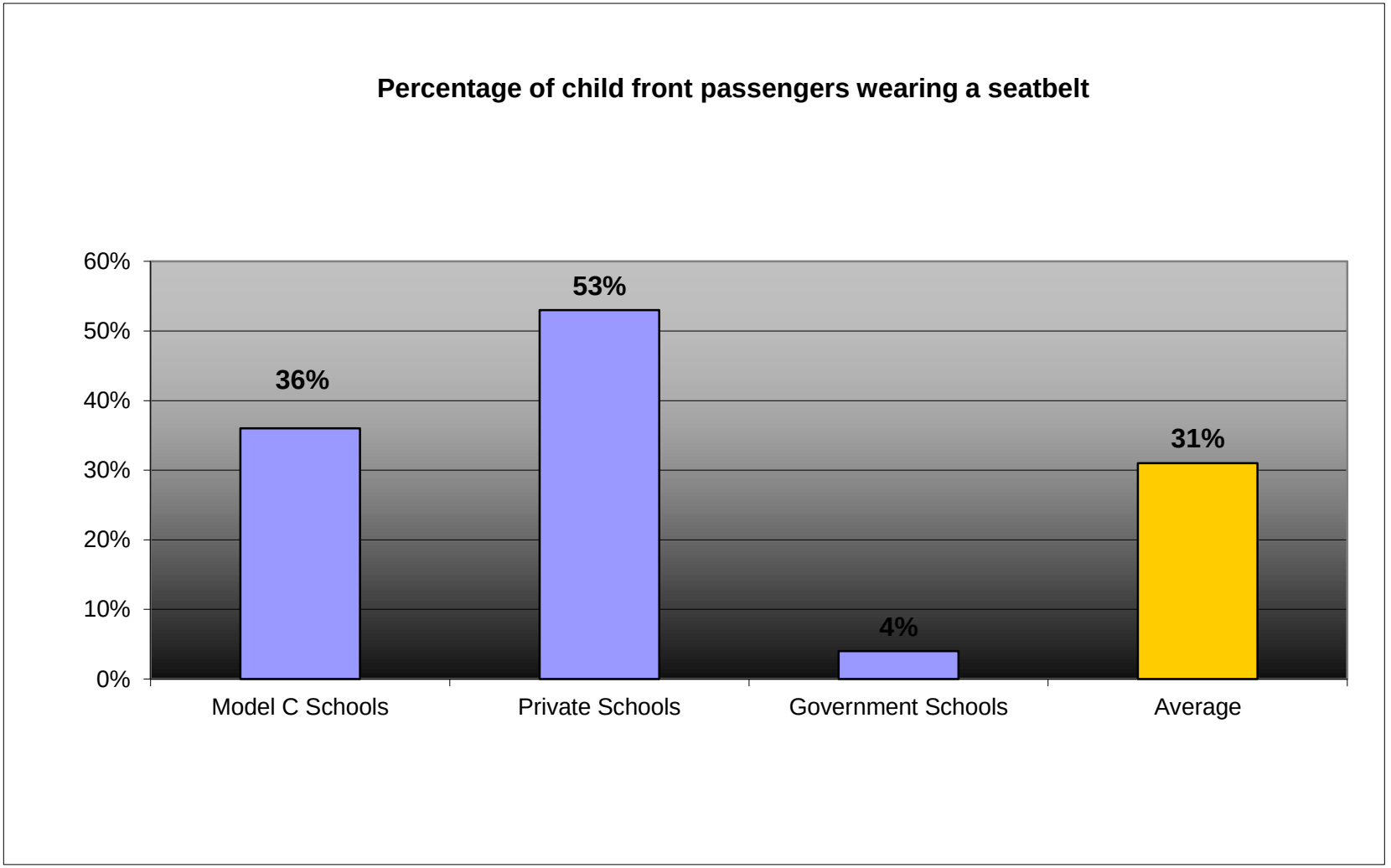
- Funding ($20 000)
- 2 staff members
- Many cars have very darkly tinted glass so unable to see occupants
- Aggressive drivers, and unresponsive and defensive school staff
- Concerns that the children were so vulnerable

Pre tests. Drivers at schools

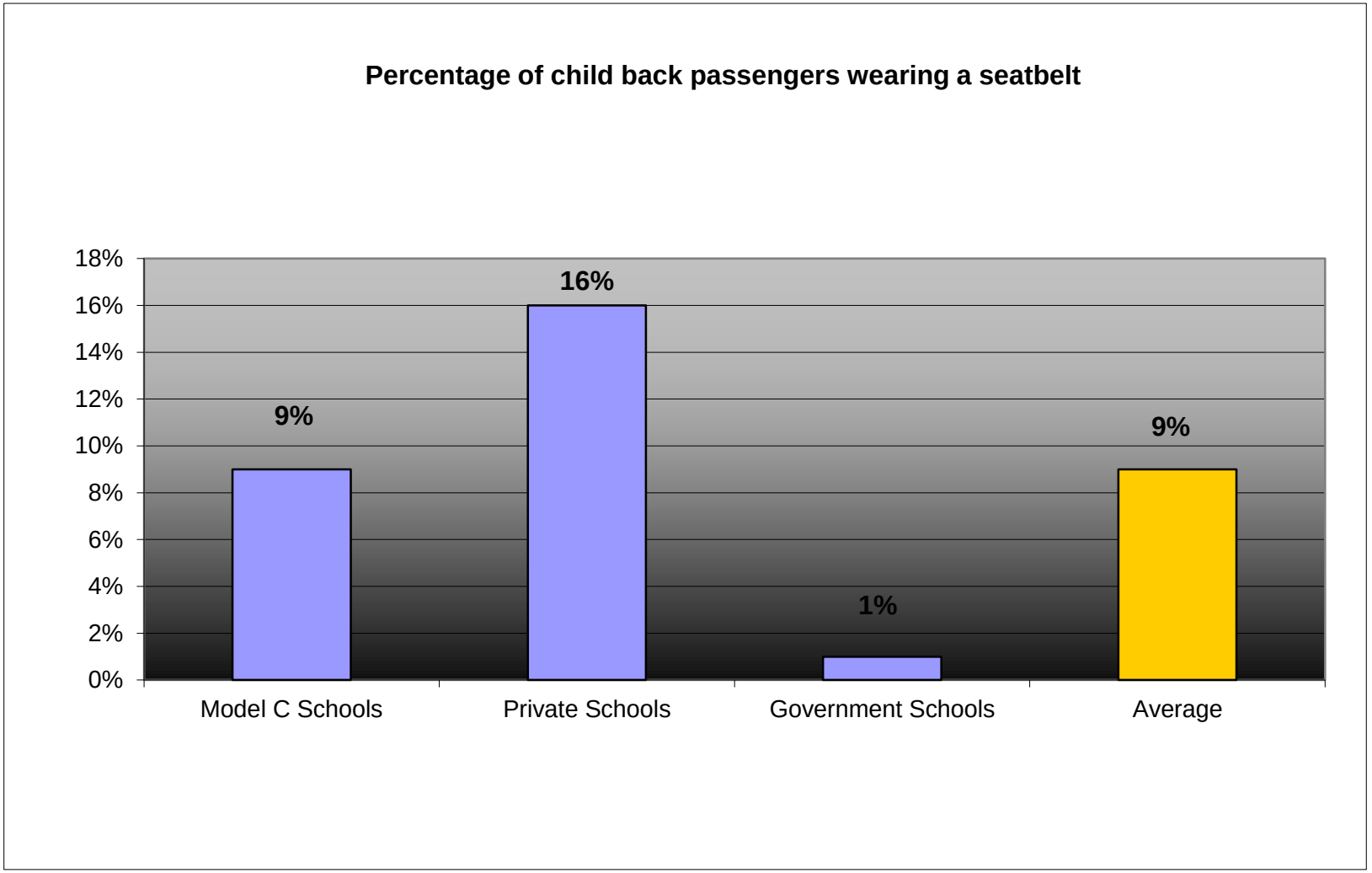


Pre tests. Front seat - children.

(Children often buckled up in adult seat belts)



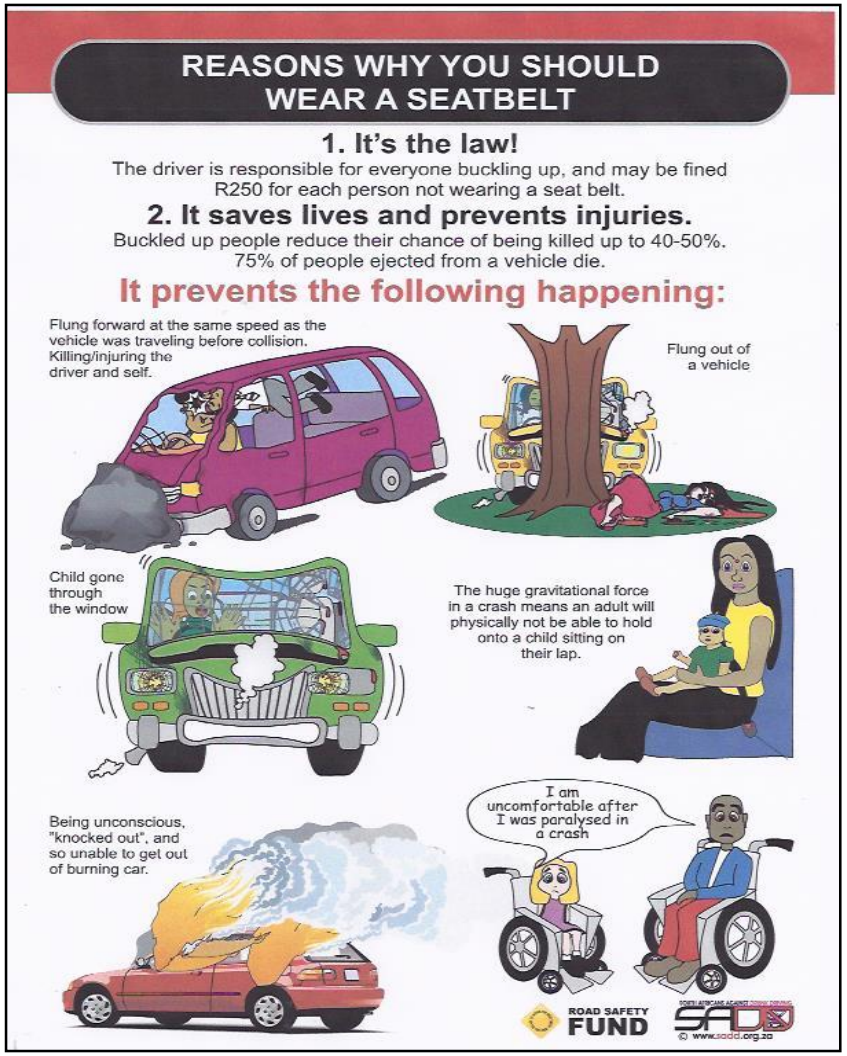
Pre tests. Back seat – children.



Materials produced for the project

- Seatbelt DVD
- Posters - 2 different designs
- Bumper stickers
- Seatbelt manual

Posters


REASONS WHY YOU SHOULD WEAR A SEATBELT
1. It's the law!
The driver is responsible for everyone buckling up, and may be fined R250 for each person not wearing a seat belt.
2. It saves lives and prevents injuries.
Buckled up people reduce their chance of being killed up to 40-50%.
75% of people ejected from a vehicle die.
It prevents the following happening:
Flung forward at the same speed as the vehicle was traveling before collision. Killing/injuring the driver and self.
Flung out of a vehicle
Child gone through the window
The huge gravitational force in a crash means an adult will physically not be able to hold onto a child sitting on their lap.
Being unconscious, "knocked out", and so unable to get out of burning car.
I am uncomfortable after I was paralysed in a crash
ROAD SAFETY FUND
SADD
© www.sadd.org.za

ADULT SEATBELTS ARE TOTALLY INAPPROPRIATE FOR CHILDREN.
THE REASON
Seatbelt syndrome injuries are a range of injuries that children receive from using unsuitable and inappropriate (adult) seatbelts and or from the seatbelts themselves.
If the belt is behind the back and across the hips
The upper body can still move forward and so child's forehead/face collides with seat in front which can also cause jack knifing to head and severe damage to neck.
If the belt is across the neck
Neck and spinal damage can occur
If the belt is across the abdomen and behind the arm
Ruptured intestines & diaphragms can occur.
Recommended types of Child Restraints (W.H.O.)
Safest place for under 12 year olds is in the back seat with the appropriate restraint per size.
Use of the appropriate type of restraint for a child's age, height, weight and physical limitations reduces death of children by between 50% and 75%
Children age 6 - 11 yrs
Booster Cushion
Booster cushion (22-36kg)
Raise sitting position of child so the adult seat belt lies properly across the chest (across shoulders not neck) & low across pelvis
Children age 4 - 6 yrs
Booster Seats
Booster seats (15-25kg)
Raise sitting position of child so the seatbelts are in the correct position.
Babies & Children age 1 - 4 yrs
Rear Facing & in the back of the car
Bone forming still happening - so the skull is not as strong as an adult. Limits forward head movement & distributes crash forces across a wider area.
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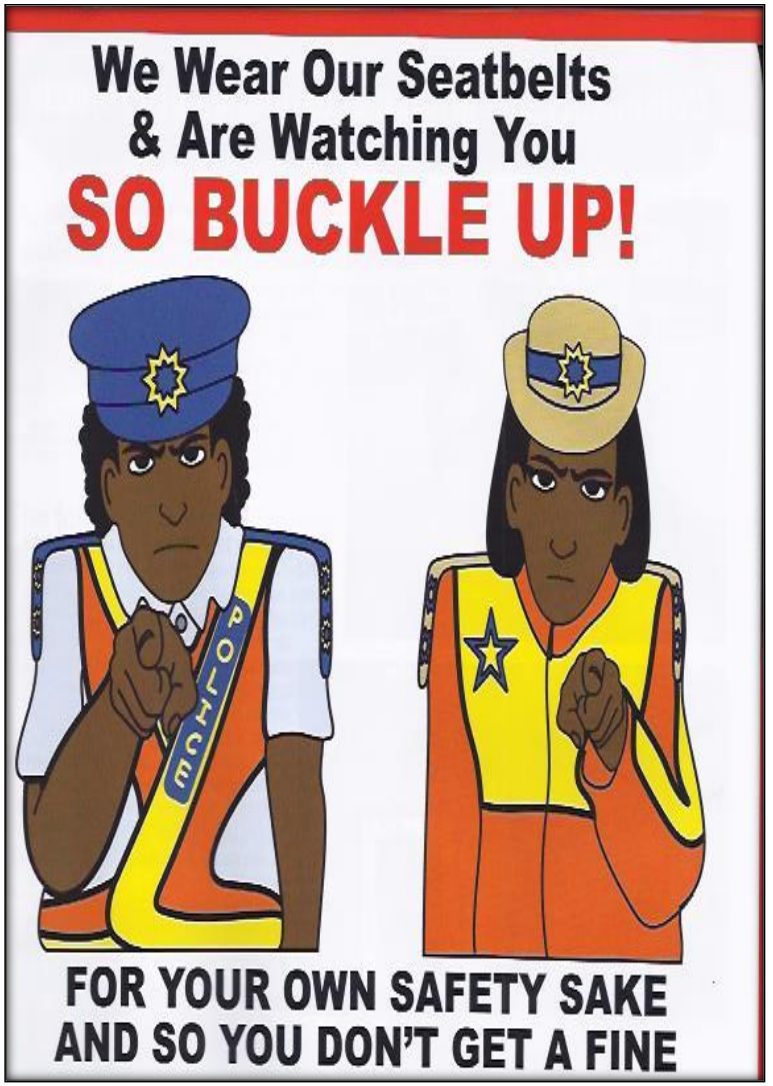
Engagement with SAPS national and PMB.

- SAPS. H. O. Pretoria
- PMB research - 4% wearing rate



1 August 2014. By e mail.

- Further to our discussions about seatbelts, I confirm that I have done a circular, and will be facilitating an article in the KZN Police Magazine about buckling up, together with some photographs to be taken.
- I have to do this in conjunction with our communication services on a formal basis.
- I have provided to them the legal details and the consequences thereof, and will work in parallel with them to create the buckle up and don't use a cell phone whilst driving profile.

Brig W N McCullough

Head, Provincial Litigation & Support Services

Legal Services, Durban, KwaZulu-Natal

ENGAGED WITH:

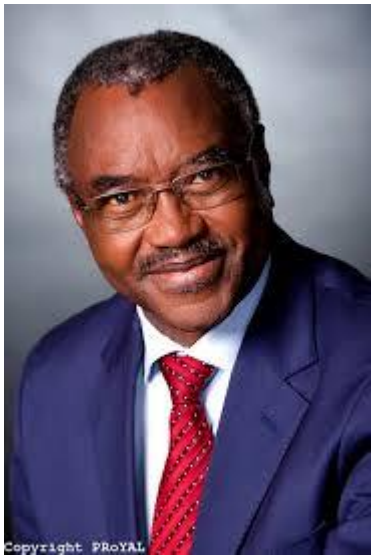
- Traffic Police PMB 17% wearing rate
- 54% wearing rate in PMB

Also engaged with

Dignitaries asked to have photos taken saying: “I buckle up in the backseat because it is the law, and safest thing to do.”

Mayor of PMB -
Chris Ndlela

MEC Transport WC
Donald Grant



MEC Transport KZN
Willies Mchunu

Educational work

- Staff involvement, learner education and manuals/posters/bumper stickers given

Once the pre survey was completed there was media involvement and signage was erected.

April 2, 2014 EDUCATION
maritzburg FEVER 9

Buckle UP

>> Results show that very few children wear seatbelts

NICOLE JOHN
>>nicole@pmbfever.co.za

LINDEN Smith was the first lucky pupil at Woodlands Primary School to receive a car booster seat from South Africans against Drunk Driving (SADD), as part of their seat belt awareness campaign.

SADD was the recipient of an international grant to undertake a seat belt research project in Pietermaritzburg. The pre-survey was conducted in 16 primary and high schools in the greater Pietermaritzburg area, including private, former model C and government schools.

Caro Smit, SADD director, said that the importance of wearing a seat belt is second to none and that children are at risk of sustaining seat belt related injuries if they are not buckled up or if they are buckled up incorrectly with the adult seat belts in cars.

"The results of our initial surveys were extremely worrying. We found that very few children are buckled up, in particular in the rear of the car. As part of this project, SADD are running awareness drives in schools and providing life orientation teachers with information to conduct road safety education with their pupils," said Smit.

Not safely buckled up

Research shows that very few kids use car seats or wear seat belts

Safely buckled up. Jival Naidu (2) shows how it should be done.
PHOTO: JONATHAN BURTON

THAMSANQA MAGUBANE

RESEARCH by a local non-governmental organisation has revealed shocking statistics that show very few parents ensure their children's safety by making them use car seats or wear seat belts.

South Africans Against Drunk driving (Sadd) conducted a seat belt study over a year and a half. It visited 16 schools that included private schools, government schools and former Model-C schools, observing more than 2 500 cars.

During the study, which was funded by the Road Safety Fund in the UK, the researchers stood outside the schools and physically counted cars that were dropping off children.

They counted 2,523 cars.

The survey looked at different things, such as how many children in the front seat of the car were wearing seat belts and how many in the rear seat were wearing seat belts.

It also looked at parents — how many males were wearing seat belts and how many females were buckled up.

The research differed slightly when it came to taxis; only the children in the front seat were recorded if they were wearing seat belts or not.

Charlotte Sullivan, a director and fundraiser at Sadd, said they were shocked by some of the trends they found when analysing their research.

The organisation said what was most shocking was that 93% of the children seated in the back seat were not wearing seat belts. "We expected that the seat belt wearing rates would be low but not this low," said Sullivan.

"There is this misconception that if you are sitting in the back seat you are safe, but that is not true. For instance, if a car crashes at a 100 kilometres an hour, the person sitting in the back seat will go through the windscreen at 100 km per hour ... They become a missile that can kill others in the vehicle."

She said, if you are thrown out at that speed and land on the highway, there is little chance of survival.

They were also shocked to discover that only 76% of children in the front seat were wearing seat belts.

She said in other instances, people make the mistake of thinking that because there was an air-bag, they were safe and did not need to put on their safety belts. "The air bag comes out at 200 km per hour; if a child does not have their seat belt on, they could be severely injured."

She said another problem was that people were also using adult's seat belts to secure children, and because the children are not big enough, the seat belts cut across their necks and in a crash, those seat belts could cause serious neck injuries.

The research found that in the Model C schools, only 36% of children were wearing seat belts in the front of the car when being dropped off. This number increased to 53% in private schools and dropped dramatically to four percent in public schools.

Caro Smit of the organisation said this was a violation of the law; the driver can and should be fined for every person in the car that is not wearing a seat belt.

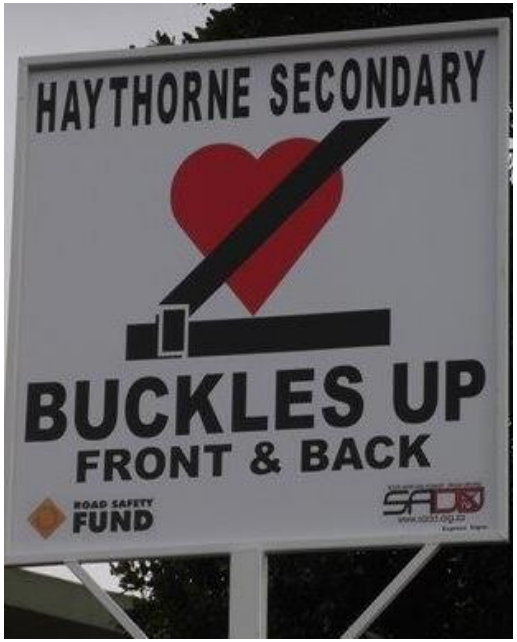
Smit said although South Africa is a signatory to the Decade of Action, which is meant to reduce the death toll on the road, the country was struggling. In fact, the deaths on our roads have been increasing.

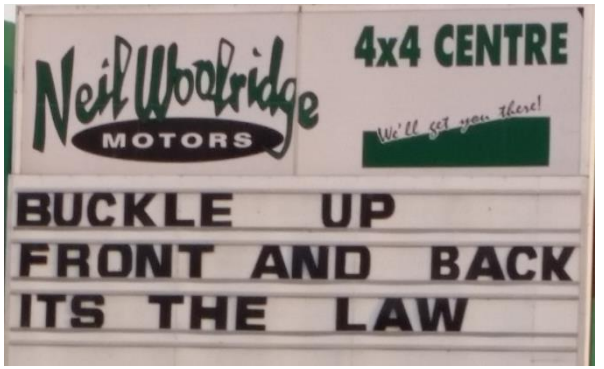
"If people wore seat belts, we would reduce the deaths on the roads by 30% immediately," she said.

Sullivan said they were now engaging schools on the importance of seat belts and providing educational talks and materials. They were also inviting those with car seats they do not use to donate them so they could be given to those families unable to purchase them.

Spokesperson for the Department of Transport Kwanele Ncalane said they were engaging with Sadd over the study. "It exposes the level of ignorance amongst the motorists ... They ignore these small rules that are designed to protect their lives."

He said the department had instructed its traffic officers to enforce the seat belt rule.





"SADD (South African Against Drunk Driving)

At assembly on Monday 12th May, Charlotte Sullivan from SADD addressed the boys about the importance of wearing a seatbelt - not only in the front seat but as a passenger in the back seat as well.

A survey conducted at Cordwalles by SADD in 2012/2013 reveals the following:

Confidential Results …….% % % %% %

Some advice from the experts:

• Buckle all children, ages 12 and under, in the back seat. Airbags can kill young children riding in the front seat. Never place a rear-facing car seat in front of an airbag.

• Buckle children in the middle of the back seat when possible, because it is the safest spot in the vehicle but only if the child is in a car seat using a full seat belt and NOT a lap belt

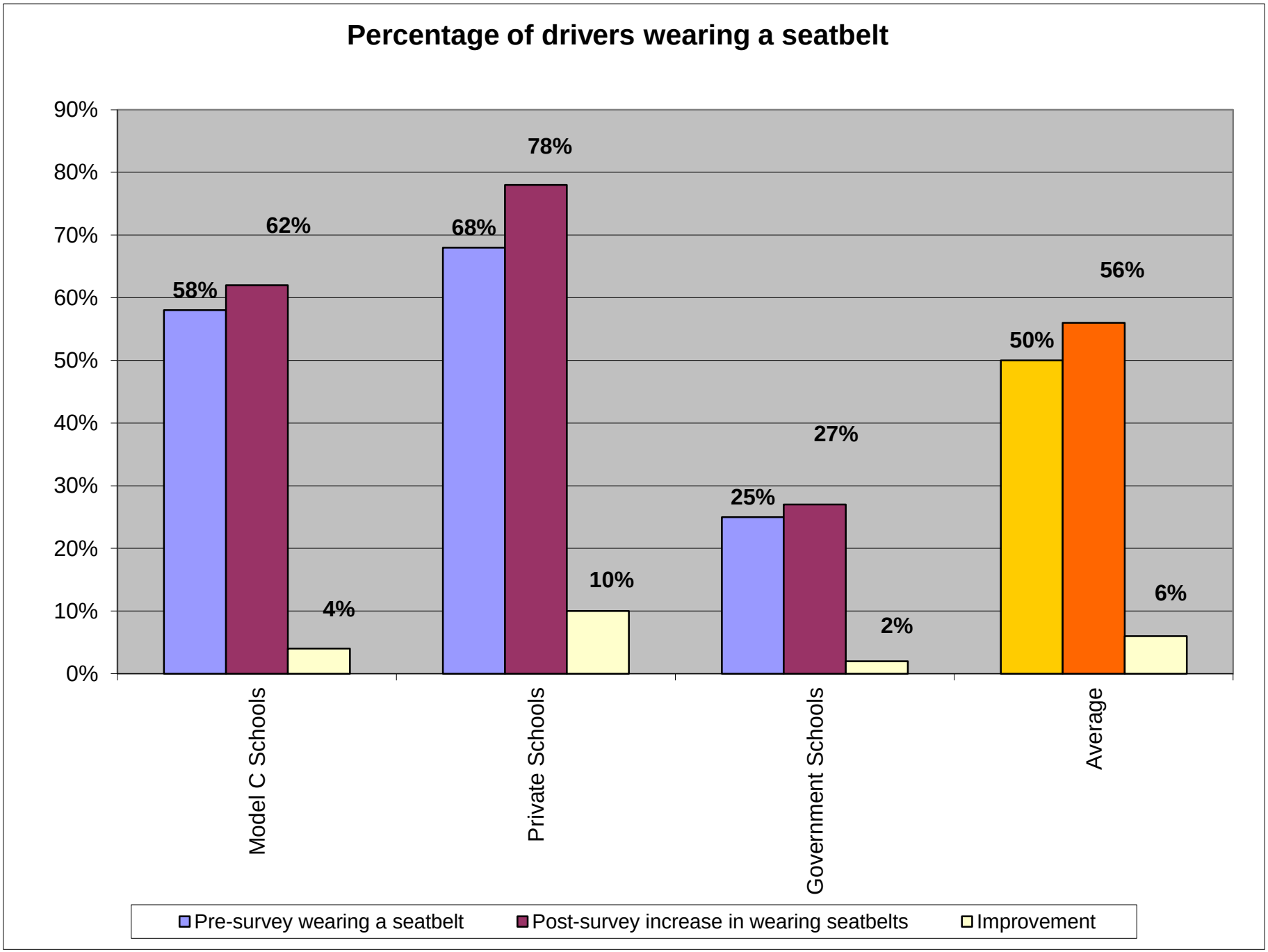
• Buckle children in car seats, booster seats, or seat belts on every trip, no matter how short.

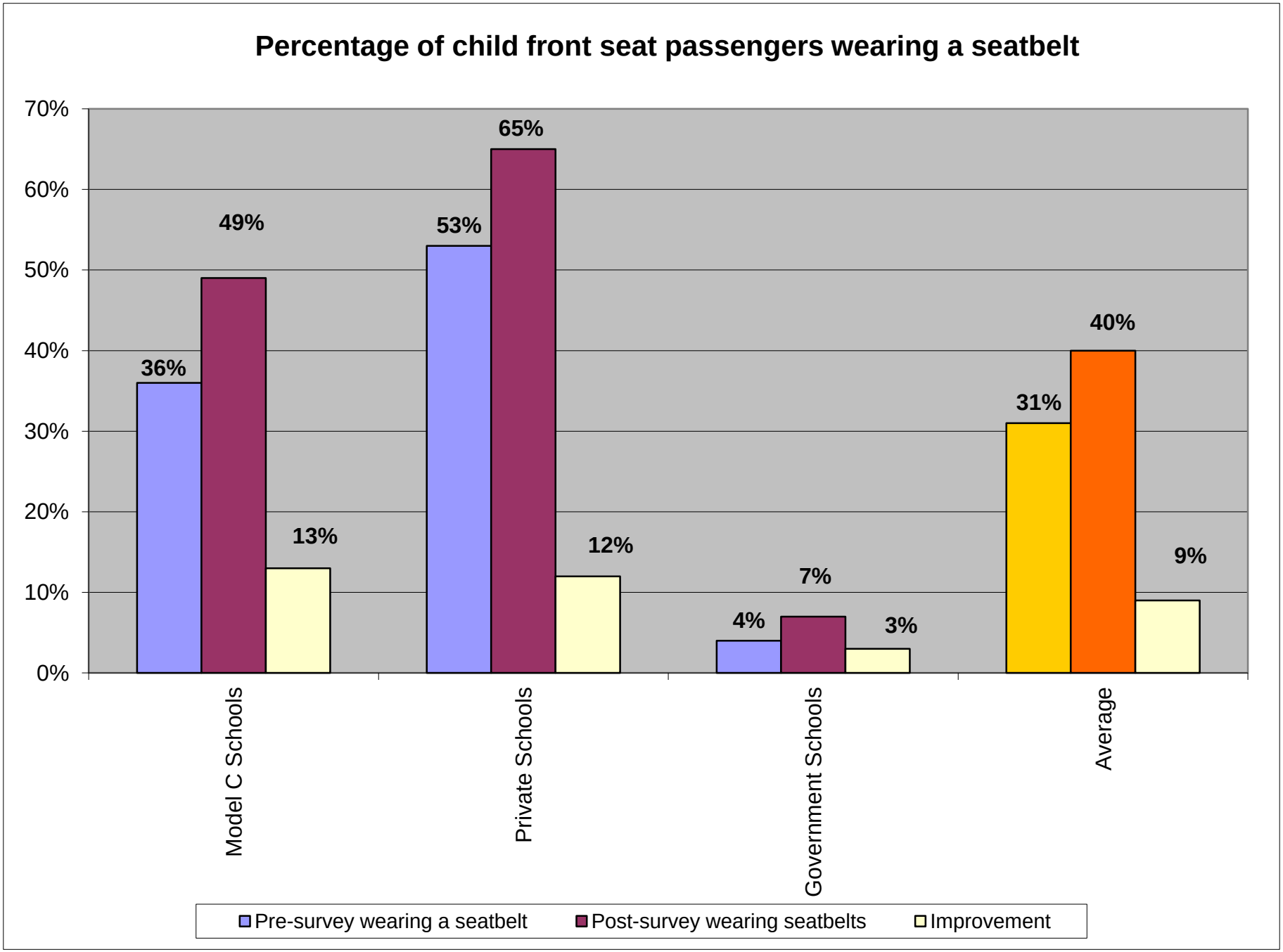
• Set a good example by always using your seat belt - IT IS THE LAW AND YOU WILL BE FINED FOR NON COMPLIANCE.

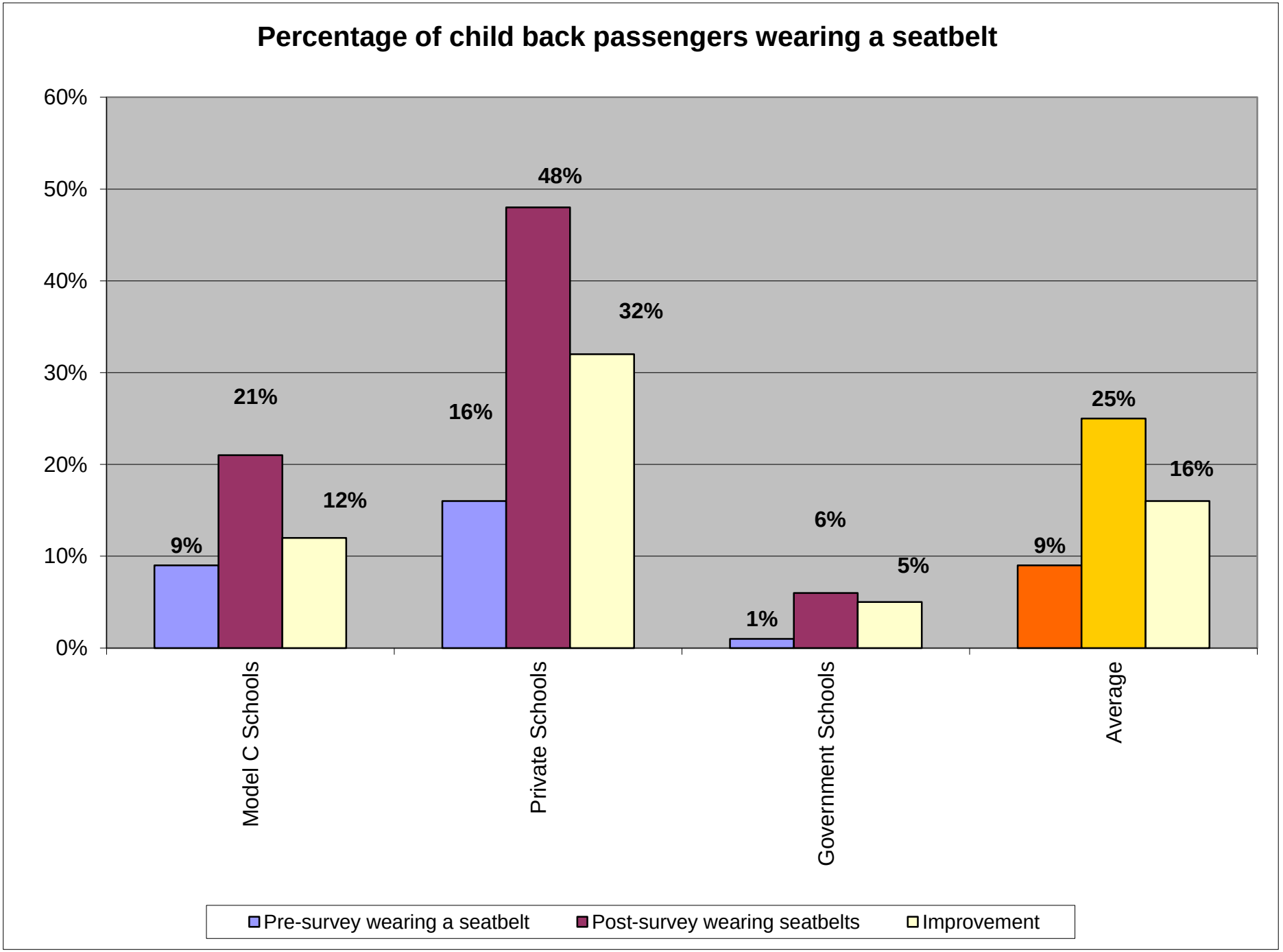
Please buckle up your precious cargo!"

Distribution & collection of seats

POST RESULTS!!


Percentage of drivers wearing a seatbelt
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
58%
62%
4%
68%
78%
10%
25%
27%
2%
50%
56%
6%
Model C Schools
Private Schools
Government Schools
Average
Pre-survey wearing a seatbelt
Post-survey increase in wearing seatbelts
Improvement


Percentage of child front seat passengers wearing a seatbelt
70%
60%
50%
40%
30%
20%
10%
0%
36%
49%
13%
53%
65%
12%
4%
7%
3%
31%
40%
9%
Model C Schools
Private Schools
Government Schools
Average
Pre-survey wearing a seatbelt
Post-survey wearing seatbelts
Improvement


Percentage of child back passengers wearing a seatbelt
60%
50%
40%
30%
20%
10%
0%
9%
21%
12%
16%
48%
32%
1%
6%
5%
9%
25%
16%
Model C Schools
Private Schools
Government Schools
Average
Pre-survey wearing a seatbelt
Post-survey wearing seatbelts
Improvement

Observations from data

- Extremely low wearing rates- especially in the rear of the vehicle
- Overloading of children- particularly in minibus taxis
- Many unsafe road crossing practices due to lack of points men/traffic personnel
- Large percentage of children have little or no basic road safety knowledge, e.g. how to cross a road, which side of the vehicle to exit
- Large number of children being transported in the front seat of vehicles whilst not being buckled up and/or using an adult seatbelt
- Virtually nil seatbelt use in Minibus Taxis

Limitations to the project and conclusions

- Authorities took a long time to react & engage meaningfully with SADD
- Lack of enforcement
- Education alone is not sufficient to have a meaningful impact
- Only limited numbers of the schools will continue with the education, use the manuals and other materials supplied
- Only children were part of the education process - therefore parental influence is lacking

Conclusion

- Wearing rate will only go up if law enforcement is properly implemented and people are fined
- Seat belt wearing rate only went up significantly in independent schools
- Education alone is not sufficient to have a meaningful impact
- Education is only effective with good parental involvement/media links and enforcement
- Enforcement, enforcement, enforcement!

Thank you! Questions?