## 5. CHRISTCHURCH ROAD SAFETY COORDINATING COMMITTEE

Officer responsible	Author
City Streets Manager	Susan Cambridge, DDI 332-2722

The purpose of this report is to provide information on projects being undertaken by the Christchurch Road Safety Coordinating Committee.

The section headings used in this report are issues identified for action in the Christchurch Road Safety Strategy. Project management groups plan and manage actions for the year as identified in the strategy. A plan for the year is produced by each project group based on research from the Land Transport Safety Authority crash reports and other information available.

In each section of this report reference is made to the actions in the Road Safety Strategy being addressed in the planned activity for the year.

The priority actions identified at the workshop on implementing the road safety strategy are listed at the end of each section for reference.

# **UNDER-RUN PROTECTION FOR TRUCKS**

At the last meeting of the Christchurch Road Safety Coordinating Committee this issue was discussed. There have been several instances of cyclists and pedestrians being killed in Christchurch under the wheels of trucks, where the fatality might not have occurred had the truck had side underrun protection for pedestrians and cyclists as is required in some countries such as the United Kingdom.

The Committee decided on two actions. One was to ask the Land Transport Safety Authority to document the crashes where fatalities might have been prevented by under-run protection on the trucks involved. The Committee will send that information to Tony Friedlander of the Road Transport Forum.

Of the 17 cyclist and pedestrian deaths in Christchurch in the last ten years, five involved a truck where the deceased went under the back wheels from the side, and it is likely side skirts would have prevented the deaths. A further two were classified as possibly prevented by side skirts.

The second suggested action was that the Christchurch City Council should set an example by requiring under-run protection on the trucks used by City Care or any Council Unit, and on the trucks used by contractors working for the Council. If the requirement were only for City Care to install under-run protection they might be disadvantaged in the bidding process for contracts.

There is evidence that the under-run protection reduces air-flow and therefore has an economic benefit in terms of fuel consumption. However, there would be an initial cost to have the under-run protection fitted.

The Christchurch Road Safety Coordinating Committee would like to recommend that the Sustainable Transport and Utilities Committee investigate requiring under-run protection for cyclists and pedestrians to be fitted to all Council and City Care trucks and to the trucks of contractors working for the Council.

The Police Commercial Vehicle Investigation Unit investigates truck crashes. Recently they have been filling out a form for the LTSA which includes an assessment of whether under-run protection including side bars would make a difference to the outcome. These have not been analysed in sufficient detail to estimate the scale of potential reduction in deaths, but the database does contain examples where initial indications are that deaths could be prevented. Examples include car occupants as well as pedestrians and cyclists.

There is good information in the literature on rear under-run protection, which indicates that many rear protection bars in use on trucks in New Zealand are not designed or mounted for best effect. Research from a University in Brazil has produced designs that are much more effective, but not yet mandated. The need for side bars is also well documented but there seems to be little information on best practice designs, beyond the European legal requirements, which are for light weight designs that are aimed at deflecting pedestrians, cyclists and motorcyclists away from the rear wheels.



Heavy vehicle safety is a priority theme in the 2010 Safety Strategy. More work on under-ride protection for trucks is planned as part of that exercise. There is research in Holland (SWOV) that demonstrates that side protection on trucks is cost effective. Side bars are mandated for many European trucks, and researchers suggests that they are also of benefit in some car accidents though only designed primarily to deflect pedestrians, cyclist and motorcyclists. Stronger side bars would be more beneficial still but at a weight penalty. So far no country has mandated stronger side bars so there does not appear to be a best practice specification. The European research also found that more cars strike the sides of trucks than the rear.

If the 2010 heavy vehicle safety exercise recommends side protection, it is possible we may end up with better standards and practice in New Zealand and hence better results than have been achieved in other countries to date.

## **CYCLES AND MOTORCYCLES**

The group is working with a creative agency to develop bus back promotion around the theme of sharing the road. The group is also discussing a visibility campaign.

These actions relate to actions 3, 11, and 12 in the Road Safety Strategy.

New Actions from the Road Safety Workshop:

A programme to encourage cyclists to behave well.

Priorities identified at the Road Safety Workshop:

- Action 7 Road and cycleway surfaces, markings, road sweeping, surface condition, ice gritting.
- Action 8 Providing adequate road space to meet cycle safety needs.
- Action 12 Visibility of cyclists.

#### TRAFINZ REPORT

The following is a brief report on the TRAFINZ Conference in September 2002:

The main presentations from the conference are available from www.cityofdunedin.com/trafinz

# PAUL FORMAN

The star of the TRAFINZ conference was undoubtedly Paul Forman. He is Head of Investigations and Risk Management at the United Kingdom's Transport Research Laboratory (TRL). In the course of the conference he gave us several interesting and informative addresses.

In his first address he talked about testing for drug impairment. Work is being done on this including pupillary examination and physical impairment tests. He commented that the degree of impairment when using cell phones was 11% more than being over the limit drink driving, including 10 minutes after hanging up.

Tests on interactive signing where drivers are told why they are going too fast for the problem ahead. Drivers slow down after the sign.

He described the technique they use to survey crash scenes. With laser scanning they can profile a crash scene in three minutes and have the ability to look at every detail from every angle.

His second address was about accident investigation with fascinating examples of the clues that provide information about what happened in a crash.

Seeing objects, requires physically seeing them, but also recognising them. If you do not expect to see something, you may not in fact see it. Conspicuity is dependent on the mental state of the observer. In Britain, 250 Police patrol vehicles are hit on motorways every year.

He went on to talk about the liability of road controlling authorities and court cases over crashes. Management systems are important. Prior knowledge of a problem but not having done anything about it, makes the road controlling authority vulnerable. 'Recommended' means as good or better. Falling back on standards is not an excuse.

**Ray Shuey** is the Assistant Commissioner, Victoria Police. He is responsible for the Traffic and Operations Support Department.

He talked about the balance between zero tolerance and what the community will accept. Speed reduction is a major focus. Driving at 5km/h over the speed limit doubles the risk. There is a need to change attitude, behaviour and culture.

**Steve Fitzgerald** is the National Road Policing Manager for the New Zealand Police. He told us that there were 30 less deaths on State Highways over the last year. He favoured a systems approach to road safety. Sweden has a Safety Ombudsman. This works in an independent, no blame way.

**Ken Boyden** gave us an impassioned plea to have the school road safety play "Too Much Punch for Judy" in our area.

**Donna Goodwin**, Senior Advisor for EECA told us about the transport related work that EECA is doing.

**Garry Wilson**, Chief Executive of ACC told us about the aims of ACC in relation to transport. He was particularly focussed on speeds in urban areas.

**David Wright**, Director of the Land Transport Safety Authority, focussed on the need for clear zones at the sides of roads.

**Paul Burdon**, Living Streets Advocate for the Christchurch City Council explained the Living Streets concept and process. This included the 40kp/h zone in Charleston.

**Julie Woods-Dalloway** gave us a visually impaired person's view of pedestrian issues and the need for support when people have to give up driving. Ninety percent of blind people have some vision so high contrast is important. Continuity is important.

**Patsy Wakefield** gave us information about the needs of the disabled. Impediments on footpaths are particularly difficult. The height of someone in a wheel chair needs to be taken into account when installing buttons, etc.

**Celia Wade-Brown** told us about Living Streets, Aotearoa, the new Pedestrian Advocacy Group formed in Wellington.

## **HEAVY VEHICLE FORUM**

A forum on heavy vehicles gave several perspectives on the issue of having heavier trucks on our roads. Graham Taylor from Transit New Zealand, Tony Friedlander from the Road Transport Forum, Ian Hunter from Transfund and Ray Shuey from Victoria Police took part in this forum, as well as Paul Forman.

Paul talked about the safety design required for trucks in the United Kingdom including collision avoidance systems and side under-run protection for pedestrians and cyclists which have been required for years.

## Staff

Recommendation:

- 1. That the information be received.
- That the Sustainable Transport and Utilities Committee investigate requiring under-run protection for cyclists and pedestrians to be fitted to all Council and City Care trucks and to the trucks of contractors working for the Council.

## Chairman's

Recommendation:

That the above recommendation be adopted.