Share the road
Heavy vehicle drivers and cyclists

CAN CYCLING ACTION NETWORK

**Report to Nov 9th 2018**

| **Share the Road Workshops/Event Activities from** | | |
|---|---|---|
| **01/07/2018** | **to:** | **10/11/2018** |
| **Activities Delivered** | **Total # Activities to Date** | **.** |
| Driver/Trainer Workshops | 10 | 112 |
| Cyclist Workshop | 6 | 101 |
| Blindzone Workshop | 1 | 200 |
| Total Workshops (KPI Y1 = 47) | 17 | 413 |
| Event Activities | 3 | 500 |
| Presentations to Stakeholders | 26 | 741 |
| **Total #** | **46** | **1654** |

**Highlights**:

- Good feedback was received from the Share the Road paper presented at the International Cycling Safety Conference in Barcelona and the WasteMINZ Conference in Christchurch. We have been asked to submit the paper to be considered for inclusion in a special edition of the Traffic Injury Prevention (TIP) journal.
- Good progress is being made with Downers re embedding Share the Road throughout the organisation.
- Another fruitful day full of learning was spent as a passenger in a large truck, this time a logging truck in the far north.

**Updates since last report:**

- As mentioned in the previous report, one of the recommendations from the Mackie Research Review of the previous StR contract period was to look at focusing on some specific geographic regions. The presentations given by James and I to the Southern Influencing Group Road Safety Meeting, Invercargill City Council and HW Richardson's were successful in gathering support for a regional campaign to improve the safety of those pedalling around heavy vehicles. I met on the 8th with Joc O'Donnel a Director of HW Richardson's to ascertain her interest in the idea of working alongside cycling stakeholders in Invercargill and Southland to support the Cycling Plan developed by Venture South for the Invercargill City Council. My thinking is that CAN has the expertise to assist local to form an advocates group and work with the Local and Regional Councils to develop an effective cycling programme. To date there are no dedicated cycling staff on Council. The idea is that if the local stakeholders are interested, CAN would make Patrick's services available, and that we would seek local Southland funding for his time. See attached report.
- A lot of positive feedback was received from the paper presentation at the International Cycling Safety Conference in Barcelona. We have been asked to submit the paper to be considered for inclusion in a special edition of the Traffic Injury Prevention (TIP) journal. One of the main learnings was the fact that a great majority of crashes occur between trucks and bicycles when the truck is turning. While it is covered off in workshops and supporting resources, we do not mention this at the top level in our Key Messages. As few other similar campaigns do so, we will

lift the significance of this issue, but won't change the Key Messaging. See conference notes in separate report.

- I have been working closely with the Manager Environmental Sustainability for Downers on getting Share the Road integrated onto the organisations training programmes for drivers. We are currently working on preparing an article to go in their internal communications portal that will include endorsements from those who have been exposed to Share the Road workshops to date, and from senior managers in the transport side of the company. The purpose of this exercise is to articulate the problem (there have been a number of "vehicle incidents" recently), illustrate how StR is playing a major role in reducing if not eliminating such incidents, and how decisionmakers throughout the organisation can get involved in the future.

**Board Consideration for the allocation of resources to support Invercargill**

It has been identified and acknowledged that the Southland region has been lacking in the development of safe and appropriate cycling facilities. There is a strong opportunity for CAN to engage and advocate for safe and appropriate cycling. Activities would pronominally be focused in Invercargill City.

**Action Required:** Consideration of resource allocating for Patrick Morgan to support and progress CAN's Southland regional interests.

**Background**

Invercargill City Council has a wide inter-regional Cycling Strategy – Cycling Southland, https://icc.govt.nz/wp-content/uploads/2018/03/Southland-Cycling-Strategy-2018-04-16-Infrastructure-and-Services-Southland-Cycling-Strategy-Appendix-1.pdf. It has been reported that there has been little progress to implement this strategy with Invercargill City Council.

> *"At present, there is no one body acting as an advocate and taking a leadership role for achieving cycling improvements in Southland across all aspects of commuter, recreational, competitive and tourism cycling. The three territorial authorities are all involved in providing and maintaining cycling infrastructure and promoting road safety. Cycling Southland is primarily active in competitive cycling and has also implemented a number participation-based and safety programmes. Sport Southland is particularly involved in the delivery of participation-based events. Community and user groups such as the Southland Mountain Bike Club, Hokonui Trails Trust and Fiordland Trails Trust have been active in fundraising and trail development and maintenance. Not-for-profit volunteer groups and local councils face challenges in funding and progressing cycling projects. On the other hand, community and user groups are a valuable resource by assisting with cycle and mountain bike trail construction and maintenance. Improved coordination of cycling advocacy, development and funding is desirable to progress cycling in Southland and coordinate collaborative implementation of the Southland Cycling Strategy"* Ride Southland - Southland Cycling Strategy p. 69

**Opportunity**

There is an opportunity, through the advocacy role of CAN, to support a regional and collaborative approach for the promotion of safe and appropriate cycling within the Southland region.

It is proposed that Patrick Morgan, who is well experienced with CAN activities, would have part of his time engaged to link local cycling folk, partners and supporting local organisations for the benefit of advancing cycling within the region. Note, this would require a clear willingness from those in Southland to be open to someone from the outside coming in and offering to help. A big area where I believe Patrick has had a lot of experience is with managing community expectations, concerns, varying viewpoints. Patrick has been at the centre of the Island Bay Cycleway debate. It would be great if everyone could be on board and political games are not a feature at all.

There is significant opportunity that has been identified to progress cycling within the Southland region and promote the core principles of CAN. Evidence of this opportunity has been confirmed when James Newton and I visited the region and meet with local cycling stakeholders. These stakeholders included: HW Richardson, Invercargill City Council's Roading Asset Manager and the Southland / Otago Regional Road Safety Working Group (Cross-regional road safety working group to the Regional Transport Committee).

**Alignment to StR Review Recommendations**

This opportunity supports the recommendations and findings in the recent Share the Road review completed by Mackie Research.

Recommendation 3 Safe System Thinking:  Encourage industry input into cycling infrastructure

3.4 Create opportunities and a network for heavy vehicle companies to input into cycling infrastructure plans. Some of the companies spoken to as part of this review suggested a better connection between heavy vehicle companies and road designers.

3.5 Profile examples of where cycling infrastructure has made it easier for heavy vehicle drivers to see cyclists.

**Proposed Benefit**

By allocating resource and the time of Patrick Morgan to this opportunity will focus on advancing cycling within the Southland region and particularly Invercargill City. Patrick would provide an independence advocacy role to the region, link local interest groups and encourage the progression of positive steps towards to achieving the inter-regional Cycling Strategy – Cycling Southland.

Patricks role and time would support the long term engagement of HW Richardson Group and their various interests in Invercargill, both within the CBD development and as the largest corporate citizen in Invercargill.

# Profit & Loss

**Cycling Action Network (Inc)**

**For the month ended 31 October 2018**

| | Actual | Budget | Var NZD | Var % | YTD Actual | YTD Budget | Var NZD | Var % | YTD Actual July 2018-June 2021 | Overall Budget July 2018 to June 2021 | Budget Remaining |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Income** | | | | | | | | | | | |
| STR - Income from NZTA | $24,414.08 | $37,142.00 | -$12,727.92 | -34.27% | $104,118.99 | $110,264.00 | -$6,145.01 | -5.57% | | | |
| **Total Income** | **$24,414.08** | **$37,142.00** | **-$12,727.92** | **-34.3%** | **$104,118.99** | **$110,264.00** | **-$6,145.01** | **-5.6%** | **$104,118.99** | **$871,480.00** | **$767,361.01** |
| **Gross Profit** | **$24,414.08** | **$37,142.00** | **-$12,727.92** | **-34.2683%** | **$104,118.99** | **$110,264.00** | **-$6,145.01** | **-5.573%** | | | |
| **Less Operating Expenses** | | | | | | | | | | | |
| 1-STR- Workshops | $4,105.77 | $3,792.00 | $313.77 | 8.27% | $19,052.91 | $15,168.00 | $3,884.91 | 25.61% | $19,052.91 | $136,515.00 | $117,462.09 |
| 2-STR- Presentations | $3,273.74 | $2,098.00 | $1,175.74 | 56.04% | $12,420.19 | $4,443.00 | $7,977.19 | 179.55% | $12,420.19 | $39,665.00 | $27,244.81 |
| 3-STR-Events (Blind Zone Dem | $1,156.95 | $593.00 | $563.95 | 95.10% | $1,174.47 | $2,370.00 | -$1,195.53 | -50.44% | $1,174.47 | $21,314.00 | $20,139.53 |
| 4-STR-Stakeholder Engagement | $527.90 | $811.00 | -$283.10 | -34.91% | $2,184.98 | $3,242.00 | -$1,057.02 | -32.60% | $2,184.98 | $29,170.00 | $26,985.02 |
| 5-STR-Tool Box of Workshops F | $360.00 | $1,690.00 | -$1,330.00 | -78.70% | $6,380.41 | $3,259.00 | $3,121.41 | 95.78% | $6,380.41 | $25,874.00 | $19,493.59 |
| 6-STR-Monitoring and Evaluatio | $1,870.83 | $2,625.00 | -$754.17 | -28.73% | $8,058.99 | $12,487.00 | -$4,428.01 | -35.46% | $8,058.99 | $96,465.00 | $88,406.01 |
| 7-STR-Office and Workshop Mis | $646.03 | $1,477.00 | -$830.97 | -56.26% | $1,646.07 | $4,954.00 | -$3,307.93 | -66.77% | $1,646.07 | $29,273.00 | $27,626.93 |
| 8-STR-Contractor Services | $10,472.86 | $22,056.00 | -$11,583.14 | -52.52% | $45,200.97 | $56,341.00 | -$11,140.03 | -19.77% | $45,200.97 | $544,641.00 | $499,440.03 |
| 9-STR-CAN Contract Monitoring | $2,000.00 | $2,000.00 | $0.00 | 0.00% | $8,000.00 | $8,000.00 | $0.00 | 0.00% | $8,000.00 | $76,083.00 | $68,083.00 |
| **Total Operating Expenses** | **$24,414.08** | **$37,142.00** | **-$12,727.92** | **-34.3%** | **$104,118.99** | **$110,264.00** | **-$6,145.01** | **-5.6%** | **$104,118.99** | **$999,000.00** | **$894,881.01** |
| **Net Profit** | **$0.00** | **$0.00** | **$0.00** | | **$0.00** | **$0.00** | **$0.00** | | **$0.00** | | |

# International Cycling Safety Conference
# Oct 10-12 2018

**Barcelona**

## 10 Oct 2018

**Adrià Gomila, Director of Mobility, Barcelona City Council**

**"Initiatives and strategy for cycling safety and mobility in the city of Barcelona"**

Goal is to have a bike lane no further than 300m from 90% of the population. The number of people cycling matches the growth in cycle lanes. I DSIs growing at the same rates. The public bike share system has a big part to play in the growth 1.5% (2011) to 2.5% (2018). They let cyclists ride on wide footpaths at night and with children under 12. Before today there were no restrictions, the restriction has been introduced because of the increase in cycling. They are clearly indicating cycling areas in shared spaces. Personal Mobility Vehicles PMV can use bike lanes and 30kph streets. Sharrows are painted next to 30kph signs on the road.

A lot of research is being done how compliant cyclists are to rules at intersections. The emphasis is making it easy to do the right thing.

Much of their work is due to pedestrians saying get bikes off the footpaths, and the cyclists saying, you must make it safe to ride on the road.

**Aliaksei Laureshyn, Ilona Cieslik and Luca Pietrantoni**

**"Cycling Safety in EU-Funded Projects: InDev, PROSPECT & XCYCLE projects"**

Development of a connected and integrated cycling system.

Working on on bike devices to talk to radars on vehicles. Xcycle. Looking at automatic emergency braking for trucks when radar picks up cyclist in blind zones

Portugal study on passing distances show wearing hi viz or helmet doesn't affect distance.

**28. Circumstances of accidents between heavy trucks and bicyclists and implications for vehicular countermeasures**

**Dr. Axel Malczyk, German Insurers**

**Accident Research, GDV**

56 out of 383 cycling fatalities were with trucks, 49 with heavy trucks over 12 tons. Left turn crashes most prevalent. Half of trucks were construction or waste management vehicles. 40% of 1st contact point was front left corner. 2/3rds of crashes were with females. Older +45 females were high risk. Most crashes happened in bright daylight on good roads. In many cases the cyclist misjudge that the truck is turning. Training is needed. Autonomous braking is a good idea.

**51. Blind spot crashes between vulnerable road users and heavy goods vehicles in Belgium**

**Tim De Ceunynck,**

**Vias institute**

Almost half of crashes truck/bike occur at intersections due to blind spots.  Most blind spot crashes happen at traffic lights in office hours. Mostly younger faster cyclists undertake. When both are stopped older riders don't seem to be able to get away fast enough. 38% of cyclist get run over when in the front truck blind zone, this is more so with older cyclists who do not get away fast enough.

**57. Identification of causes in single sided bicycle accidents using Systems-Theoretic Accident Model and Process (STAMP)**

**Marco Reijne, Delft University of**

**Technology**

Given a high proportion of cycling crashes are due to loss of balance, he suggested that stable bikes, i.e. big tyres upright bikes are safer.

**89. Psychosocial factors associated with bicycle crashes involvement and severity: a European study**

**Federico Fraboni, University of Bologna**

Instrumental attributes relate to commuter cyclists. They enjoy risk in high traffic areas as they can feel they are in control. Maybe over confident.

Affective attributes relate to recreational cyclists. They are nervous about cars so are more likely to avoid roads with cars to be safe.

Feeling that drivers do not like cyclists make cyclists safer.

**20. Online situation and risk assessment: Improving cyclists' safety in intersections**

**Mandy Dotzauer, German Aerospace Centre**

- **Ceri Woolsgrove, Policy Officer, European Cyclists´ Federation (ECF)**
  **"Cycling road safety and European Union policy"**

Qualifications for large vehicle drivers

EU were looking at reducing number of rest days for HV drivers, this was rejected by the plenary after lobbying by ECF.

Lower seating, direct vision for construction and waste collection Trucks. Legislation is coming to require turning assist sensors linked to autonomous braking supported by ECF.

**Andrés Aparicio, Senior Manager ADAS and Automated Driving, Applus+ IDIADA**

**"Test and assessment of new cyclist safety technology in cars"**

Euro NCAP is raising the bar by requiring active safety features on new cars if they want a 5 star rating.

**49. Actual and perceived risk of bicycle crash types among older cyclists**

**Paul Schepers,**

**Utrech University**

Cyclists tend to over rate the risk of getting hit by a car and under rate the risk of them making a mistake resulting in them crashing.

**72. Measurement method for objective cyclist behaviour parameters**

**Riske Meijer, TNO**

Problems occur when cyclists are bunched up at traffic lights then move off in a great big group.

**102. Cycling Skill Inventory: Assessment of motor-tactical skills and safety motives**

**Marjan Hagenzieker, Delft**

**University of Technology**

Experienced male cyclists are the more likely than inexperienced males and all females to have an accident even though they have high cycling control skills, they tend to have low safety skills. Experienced female cyclists are safer, while they have lower cycling control skills they have higher safety skills.

**Justo Sancho, Chief of service. Deputy Directorate of Vehicles at**

**Directorate General of Traffic (DGT)**

**"E-bike regulation challenges"**

Efforts to create a European bicycle/cyclists register failed. Safety standards must be reasonably agreeable to society for them to be useful.

Recommending all eBikes be identified with QR code that would have bike approval type and owner information in it. Accreditation systems need to be set up.

**50. Nudging the attention of drivers towards possibly hazardous situations with cyclists**

**Jeroen Uittenbogaard, TNO**

Increase use of ACC

Improve driver awareness of cyclists

A hazard is a source with the potential to cause injury

Maps, flow information (when and where cyclists are likely to be present) are combined with cameras and sensors on the car. This is used to predict the likelihood of a cyclist being at an intersection. This may trigger nudge to encourage the driver of the car if there is a great likelihood a cyclist will be present. The idea is that the brakes will be applied when there is still time to stop before hitting the cyclist. The window of opportunity is often very small when the approaching cyclist is hard to see.

**67. Assessing the safety criticality of driver behaviour for cyclists at intersections based on infrastructure, driver gaze and driving behaviour**
**Irene Gohl, Bundeswehr**
**University Munich**
Looking early in the direction cyclists could come from is important. If the view is obstructed, stop before crossing into the cycle lane. The required field of view is greater the faster the cyclist is riding.

**74. Drivers' behaviour overtaking a bicycle peloton on two-lane rural roads**
**Sarah Moll, Polytechnic**
**University of Valencia (UPV)**

65% of fatal crashes in Spain happen on 2 way rural roads. Speed was the main cause.

**106. Study of the application of**
**evasive steering actions for**
**car-to-bicyclist collision avoidance**
**strategies**
**Álvaro Esquer,**

**Applus+ IDIADA**

ADAS Advanced Driver Assistance Systems

Sensors, applying emergency functions, continuous monitoring.

- AEB Autonomous Emergency Braking.
- AES Autonomous Emergency Steering

Both have to calculate last point to act. Both will avoid an object by stopping before, or driving around it.

**68. Assessment of Improved Direct and Indirect vision measures for Heavy Goods Vehicles on Cyclist Casualties**

**Arun Kalaiyarasan, Transport**

**Research Laboratory**

UK research showed that the cost benefit results were better for sensors and automated active braking systems than for direct vision cabs. There are still issues with sensor reliability.