

FINAL REPORT: AGRICULTURAL MACHINERY SAFETY AWARENESS PROJECT

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EXECUTIVE SUMMARY

The goals of the project were to create awareness of how the general public should interact with agricultural machinery on public access roads and to dispel the myth that ag machinery on public access roads is dangerous. To this end, NFF commissioned research by James Cook University to establish the risk profile of large agricultural vehicles. Consequently, the NFF engaged the communications agency Cox Inall to design a communications plan and communications material based on the research findings.

The research report *Large Agricultural Vehicles on Public Roads* that James Cook University developed was based on literature research in addition to online surveys (541 participants all up) and six face to face workshop with 101 farmers held in Canberra, Dubbo, Mackay, Adelaide, Goondiwindi and Melbourne. The workshops had great regional spread to ensure that a mix of agricultural commodity groups and provided valuable insight into near misses and actual accidents farmers driving large agricultural vehicles experienced.

The main finding of the research report was that LAVs have a very low risk profile, with a very small number of LAV related incidents nationally – approximately 56 crashes and 2 deaths per annum. In 2016 there were 1,295 road deaths, thus based on the average figures 0.15% of these deaths would have been LAV related. Consequently, the online questionnaire and the focus groups looked specifically on near misses that are a powerful illustration of how to prevent future incidents, identify that driving skills, visibility and vigilance are important.

Based on this research, the *Common Roads, Common Sense* communications campaign was developed that has three core messages:

• Look out

Roads are built for all Australians – and not all travel at maximum speed. Be aware of farmers, cyclists and trucks that might be slower

Slow down

Most accidents with LAVs in Australia are rear-end collisions due to differing travel speeds. Slow down when you see a slower vehicle ahead.

•Take care

When overtaking: Make sure it is safe to do so and you have enough space – take a moment to evaluate the situation. When an LAV heads your way: Slow down and give the oncoming LAV plenty of space.

The initial soft launch of the campaign across NFF's own media channels reached over 90,000 impressions. In addition, NFF was able to leverage its influence by managing to have several rural newspapers report on the launch of the safety campaign. To ensure that the material reaches a wider audience in 2019, NFF will apply for a second grant to focus on disseminating the material to commercial advertisement channels including regional radio and television stations as well as paid youtube pre-roll advertisements for young drivers.

MILESTONE 1: PLANNING

Very large machines are used in agriculture to produce food, fibre and livestock. These vehicles do need to travel on roads to get from farm to farm, and they are bigger, heavier and slower than passenger cars. In future, agricultural vehicles will become larger, and, with farm consolidation, may move more frequently without being able to avoid main link roads. There are peak times, such as harvest, when there are many heavy agricultural vehicles, often in combinations, on the road. During these times, there is greater likelihood that passenger cars will encounter these unfamiliar and large vehicles, and the potential for road incidents increases.

Farmers report instances of near-misses where cars appear to misjudge the distances between vehicles or fail to recognise the need to change their driving style around large vehicles. With fewer Australians living in rural and regional areas, general awareness of safe vehicle movements on country roads has steadily decreased. There is a general lack of awareness on how passenger cars can safely share the road with slow and/or oversize vehicles.

To address this general lack of awareness of how passenger cars can safely share the road with LAVs and to better understand how LAVs can be as safe as possible on public roads, NFF designed a project with the following research questions:

- 1) Research messages: How should vehicles and farm machinery interact on public access roads?
- 2) Risks associated with farm machinery on public access roads relative to the overall total number of accidents in a state. This will include safety statistics and, if possible, identify the risk profile and causation of incidents involving OSOM vehicles.
- 3) Scope out target audience and common (mis)conceptions of the characteristics of agricultural vehicles.

As part of milestone 1, NFF finalised the project scope and signed a contract with the NHVR on 13 October 2017. NFF also set up an official steering committee to provide oversight over the grant. Members of the steering committee were farmers and policy staff from a range of broadacre commodities and state farming organisations, including NSW Farmers' Association, GrainGrowers Limited, Victorian Farmers' Federation, AgForce Queensland Farmers Limited, CANEGROWERS and Cotton Australia.

MILESTONE 2: RESEARCH

The task of Milestone 2 was to commission initial research to find out more about the risks associated with farm machinery on public access roads relative to the overall total number of accidents in a state. Due to the complexity of the research phase and the fact that James Cook University (the research provider) discovered that there was no prior academic research in this area, the project took five months longer than initially envisaged.

NFF together with NHVR had a kick-off workshop on 19th December 2017. Key outcomes of the workshop were:

- James Cook University (JCU) to undertake the research on behalf of the NFF;
- Measures of success for the campaign were determined;
- The Research plan was determined, including aims of the research; and

• The timeline of the research project was agreed upon.

During the workshop, NFF together with NHVR determined measures of success for the project:

- Build body of knowledge: Set of recommendations that cover the macro level (are agricultural vehicles on public roads a problem, and if so, how much of a problem are they)
- Micro perspective: Risks that increase/ decrease size of problem/ is this a problem?
- What can we address through a communications campaign/ behaviour change
- Policy/ Advocacy agenda
- Determine whether further research needed
- Build in repeatability: Have another survey later!

NFF signed a contract with James Cook University on 15th January 2018, commissioning JCU to undertake the research.

Research method

A triangulation methodology was used to obtain data, to explore convergence and validation of issues pertaining to LAV interaction experiences on rural public roads. Three methodical approaches were used to gather information for this project. These include a literature review, a survey of LAV operators, and community members about interaction experiences and focus groups with operators. A brief overview of the approaches on data collection for each methodological phase, are briefly outlined. For more in-depth discussion on methodology readers are referred to the journal article manuscripts.

The main findings from the research included:

- LAVs are on roads all year round, mainly during daylight hours, although different types of
 equipment will be present on roads depending on the agricultural activity required such as
 planting or harvesting.
- LAV trips are usually a short distance (Mean = 35.2km), although some are travelling over 1500km which are often agricultural contractors.
- The trips of individual farmers are normally on the same route, however they occur on all types of
 public roads from local single lane dirt roads, to national multi-lane divided highways. This includes
 most operators trying to avoid busy roads by either traveling at non-busy times or using routes
 which minimise contact.
- There are small number of LAV related incidents nationally approximately 83 crashes and 3.5 deaths per annum. In 2016 there were 1,295 road deaths, thus based on the average figures 0.3% of these deaths would have been LAV related.
- Two thirds (66.8%) of people thought there was either 'no' or 'low to moderate' risk of an increase in risk of an accident on road. A third (32.3%) of the public thought that LAVs increase the risk 'moderately' to 'highly' of there being an accident with only 2.5% thinking that it was high.
- Near misses are a powerful illustration of how to prevent future incidents, identify that driving skills, visibility and vigilance are important.

While the overall level of incidents and near misses is very low compared to cars and trucks, the industry is keen to understand what additional steps can be taken to encourage safer driving from all vehicles and ensure the message is clear about the need for "sharing the roads". As such several recommendations emerged from this project and include:

From the research the participants identified that the focus for an immediate safety campaign could be about:

• The public understanding the characteristics of LAVs, i.e. oversized nature, slower operational speed and the safety mechanisms in place such as escort or piloting vehicles, flags and lights.

- The public understanding what to do when you encounter a LAV, i.e. pull over to the side and allow the LAV to pass, or how to pass one safely such as allowing for adequate space.
- The need for LAV's to be on roads and where they fit in the production of agricultural commodities.
- Benefits of adaptive driving, i.e. driving which is responsive to the road conditions and other vehicles.
- A general campaign to respect all road users with a focus on agricultural vehicles
- Helping the public to understand the needs of these vehicles when on roads i.e. turning ability, visibility of other vehicles, speed and room on road.

James Cook University recommend based on research that the initial campaign should:

- Have an overall message that focuses on "respect of all road users on roads" and "the need for LAVs
 to be on public roads". The target of this campaign would be all road users although it would benefit
 by focusing on engaging and informing motorists who are unfamiliar with agricultural machinery
 movements.
- Messages should also include information about the safe interaction with LAVs ie when approaching a LAV "slow down, pull over, adapt your driving". The target of this campaign would be rural road users.
- Adding a section in the driver licence process (i.e. in the information sent out and the written test)
 around LAVs would provide an ongoing mechanism for training all new drivers about what to do
 around LAVs. This would ensure that both general motorists as well as those who drive in the
 agricultural community are equally educated.
- Respect for road users of all types was identified, this included the idea for the development of a noncompulsory code of a conduct about how LAV operators should behave when on public roads and what
 is expected of the community. This document would be developed by the agricultural industry as a
 guide to safe driving on public roads and be able to educate the public about how LAV's operate on
 public roads.
- Further work is required in improving the underlying data and understanding of incidents involving
 LAVs. While this project has made steps to determine how much of an impact LAVs are having on road
 incidents, it is suggested the evidence could be strengthened further by exploring fatal events and
 having better and detailed incident data which clearly separates out agricultural vehicles (including the
 regular reporting of this information).

James Cook University recommend the following to achieve this:

- A study of road fatalities with a focus on rural areas and LAVs using the National Coroners Information
 System to explore all risk factors, quantify the number of deaths due to LAV interaction, trends over
 time and risk factors. This information could also be linked to other road trauma data to provide a
 comprehensive picture around LAV incidents and prevention options.
- Development of clear terminology and definitions around LAVs, separate from other large / heave
 vehicles on roads, to then be implemented by each jurisdiction to help provide clear ongoing data
 around LAV incidents on public roads. This would allow for appropriate comparison with other road
 fatality statistics.
- Further work exploring road designs, which facilitate easy movement of LAV and also designs of LAVs which allow them to be moved (ie ease of changing height and width) easily on roads could also increase safety.
- There could be value in the industry advocating for future design of LAV to be able to be packed down
 to appropriate road widths to allow for movement on road, as this was articulated as the one
 dimension of LAV that most impinges on the safety of other road users.
- Technological advances should be further considered as an active and real-time means of
 communicating with the driving public about LAV presence on rural roads. These could incorporate
 driver awareness signs, such as those present on major highways or scanning technology similar to toll
 technology, or satellite navigation notification used to transmit data to real-time signs or apps.

 Encouraging transport agencies and police to report statistics specifically for agricultural vehicles to enable monitoring of statistics.

On 12 August 2018, NFF uploaded the research report to the NFF website:

https://www.nff.org.au/shared/6105.pdf

MILESTONE 3: CAMPAIGN PLAN

Based on the research report undertaken in *Part A – Baseline Research*, NFF has prepared a request for quotation for *Part B – Campaign Plan* that was open for tender offers for a period of three weeks. NFF received three tender offers and chose Cox Inall (Sydney) to undertake the communications piece. A contract with Cox Inall was signed in September 2018. Cox Inall had the task to:

- 1) Scope out target audience and common (mis)conceptions of OSOM agricultural vehicles.
- Research messages: How should vehicles and farm machinery interact on public access roads.
 Develop communication strategy: How should the messages be conveyed to a broader audience (audio visual/ infographics etc.).
- 3) Liaise with key stakeholders to gain support for messaging and broad strategy. This will be important so that other road campaigns complement and don't compete with this one.
- 4) Pilot test these messages via social media or other channels in a defined region during harvest.

The NFF hosted an inception workshop with Cox Inall at the NFF offices on 12 September to design a communications plan to inform the communications campaign. Due to changes in the NHVR project management team, no planning workshop with the NHVR was held, with the NHVR cancelling this deliverable on 18 September 2019, thus formally releasing the NFF from any contractual obligation in relation to the Milestone 3 planning workshop deliverable.

The communications plan was approved by the NHVR communications team in the week commencing 5th November.

KEY OBJECTIVES OF THE LAV ROAD SAFETY COMMS PLAN

- To make a positive contribution to the safety of road users by raising awareness of the presence of LAVs on public roads
- To make a positive contribution to the safety of road users by providing information which may be used as a guide for driver behaviour when interacting with LAVs
- To raise community understanding of the need for LAVs to be on public roads and the important role these machines play in the production of food and fibre
- To change the perceptions of road managers and police in relation to the road safety risk associated with the operation of LAVs on public roads by using the compelling data collected by James Cook University
- To raise community awareness of agriculture and the valuable contribution it makes to Australian communities and the economy
- To foster a feeling of cooperation, mutual respect and goodwill between the farming community and general road users.

BRAND POSITION AND TAGLINE

The developed brand positioning and theme of the Campaign Plan was to build a sense of camaraderie and cooperation between drivers and operators of large agricultural vehicles on public roads. It seeks to simplify driving in proximity to LAVs by demonstrating a common sense approach will result in safe outcomes. This is encapsulated by the long-term idea and campaign tagline:

[&]quot;Common roads, common sense."

To help common sense 'kick in' when people encounter LAVs, and provide a 'go to' for drivers, a new three step ritual has been developed to support the 'Common roads, common sense' concept and to help LAVs seem more familiar and easy to deal with:

- Look out
- Slow down
- Adapt

A symbol to accompany this ritual has been developed, based on the laconic 'country wave' from the steering wheel, which is already familiar to those driving on country roads. This will be the campaign's distinctive brand asset and create a point of instant recognition in the future to promote a friendly, cooperative behaviour and tone.

PRIMARY AUDIENCES

- Road users who may interact with LAVs on public roads:
- Grey nomads
- Travelling business people/sales people
- Holiday makers
- Families visiting regionally-based relatives
- International visitors/backpackers
- New entrants into the farming industry
- Young or inexperienced drivers
- Farmers and farm employees including those operating large agricultural vehicles.

COMMUNICATIONS MIX

- Media releases
- Speaking points for spokespeople
- Social Media
- Infographic Suite
- Pre-scripted social media posts
- Social influencers
- Written Case Studies
- Op-ed
- Fact Sheets
- Stakeholder Information Packs
- Road Signs and Billboards
- Radio Advertising
- Bumpers Stickers
- Video

MILESTONE 4: CAMPAIGN DEVELOPMENT AND LAUNCH

After Cox Inall developed a suite of communications material, NFF and NFF members conducted a soft-launch of the communication strategy on NFF and NFF member platforms as well as achieving free coverage during harvest through rural media outlets.

For the launch of the campaign, the tagline "Common Roads, Common Sense" was developed. In addition, the advice: "Look out, Slow down, Take care" was refined as part of the branding and messaging of the campaign.

On 31 October and 1 November 2018, filming of the campaign took place in country Victory (grain growing region). As part of the filming, several pictures were taken and the below picture (built into a social media tile) has become the visual element specific to the Campaign. In addition, the website

https://farmers.org.au/campaign/common-roads-common-sense/ with all of the communications material on it went live on Wednesday, 14th November when the *Common Roads, Common Sense* campaign was launched by Deputy Prime Minister Michael McCormack at Yerong Creek in NSW with a Media Release. Consequently, NFF used their own social media channels to promote the Common Roads, Common Sense campaign and published the video on youtube on 14 November 2018.

SOFT LAUNCH REACH

After NFF published the campaign as the opening email in its Weekly Wrap on 17 November 2018, the campaign page has been viewed 1640 times.

Facebook advertising

From the day of the launch the below Facebook post was posted and published as A 'paid' Facebook ad for three days. It reached 4030 people and was shared 43 times. The post has now been renewed as a Facebook paid ad until the end of summer, as a minimum. During this time it is expected to reach many hundreds of thousands of people.

Twitter

The same post on the NFF's Twitter account has so far made 84,818 impressions and had 5835 enaggements.

MILESTONE 5: DEVELOP THE CAMPAIGN PLAN FOR STAGE 2

NFF is planning to apply for a second grant to implement the wider communication strategy with the general public. To this end, NFF has developed a Campaign Plan for Stage 2 of the project. Stage 2 of the National Farmers' Federation's (NFF) **Sharing the Road Education Campaign (agricultural industry)** will draw on research commissioned by the NFF and see the Stage 1 campaign that was launched in November 2018 "up-scaled" to be delivered across mass media channels (TV, radio, print) to reach a broader audience.

In 2018, based on the findings from the JCU report, NFF commissioned the Communications Agency Cox Inall (Sydney) to design a Communications Strategy to help people using roads within agricultural regions to understand what safe driving around large agricultural vehicles constitutes. The risk associated with the mixing of agricultural machinery and general road interacting on our main roads is nation-wide. For this reason, this campaign will have a truly national approach to improve the safety for <u>all</u> regional road users.

In particular, the second stage of the Campaign Plan will target the following communications channels that stage one was not able to utilise due to funding constraints with material already prepared and ready to roll:

- Stakeholder information packs for driving schools and tourism offices;
- Road signs and billboards in rural areas around harvest time;
- Rural radio advertising in local stations around harvest time;
- Bumpers stickers for farmers; and
- Rural TV advertising in local stations around harvest time.

EVALUATION AND KEY LEARNINGS

DELAYS

Due to the unexpected finding by James Cook University that LAV safety research in Australia has so far only taken place in grey literature, the research phase of the project was delayed by five months. This finding was, however, major, and JCU undertook excellent primary research to fill the gaps. To this end, JCU held additional face-to-face workshops with farmers that were not in the initial project scope, bringing the total number of workshops up to six workshops with 101 farmer participants. The workshops had great regional spread to ensure that a mix of agricultural commodity groups and provided valuable insight into near misses and actual accidents farmers driving large agricultural vehicles experienced. Saturation was reached when the final

workshop provided no additional insight into the safety challenges of driving LAVs on public roads. In addition, JCU undertook extensive online surveys with over 500 participants. While the delay was unexpected, it was necessary for JCU to produce a rigorous piece of research and shed light into the knowledge gap around the safety profile of LAVs. Following on from this initial research project, JCU is now planning to publish their findings in an academic journal and to undertake an even more extensive research project by looking at the findings in coroners' reports relating to actual fatalities in crashes involving LAVs. The NFF is therefore really happy with the research and kept the NHVR abreast of all delays along the way to ensure that the NHVR as the project owner understood why delays occurred and how they benefitted the project.

KEY LEARNING

A key learning from this project was to always allow more time for rigorous academic research as this is something that cannot be rushed. Consequently, should the NFF commission another research project that includes source analysis and primary research, the NFF will build a bigger contingency into the timeframe.

In addition, it was great to see how face-to-face meetings with the NHVR helped overcome hurdles along the project management journey. The NFF cherished this opportunity to address the project face-to-face and was very grateful to the NHVR staff, in particular Tanya MacDonald, Laura Dean and Anthony Sullivan, to take the time to talk us through the project and hurdles.

EVALUATION

The NFF considers this project a success for three main reasons:

- 1) The primary research conducted by JCU about the safety profile of LAVs in Australia has shed a lot of light into what the innate risks of moving LAVs on public roads are, mainly due to the high speed differential between passenger cars and LAVs. At the same time, the research has also highlighted that these risks are very low; in fact, they are so low that the best mitigation strategy is to help drivers understand how to safely interact with LAVs instead of imposing additional regulatory requirements on farmers that do not make the road any safer.
- 2) The developed campaign slogan "Common Roads, Common Sense" is a positive message that appeals to passenger vehicle drivers. The NFF is looking forward to rolling this slogan out to a wider audience than was possible under the initial soft launch of the Campaign.
- 3) Although the NFF was limited in our resources to roll out the Campaign to a wider audience, more than 90,000 unique users were reached during the soft launch of the Campaign and the Campaign had traction with NFF members such as Victorian Farmers' Federation, GrainGrowers and AgForce Queensland Farmers multiplying the Campaign in their newsletters. The Campaign was also picked up by several rural newspapers and online outlets free of charge.

In summary, the NFF is grateful to the NHVR and the Commonwealth Government to have funded this valuable project that shed light into the risk profile of LAVs, developed a plan to address these risks and enabled to reach rural and regional drivers through the soft launch of a communications campaign.

NEXT STEPS

As outlined under Milestone 5, NFF is planning to utilise the material developed during the course of this project in a second much larger communications campaign to reach an even wider audience, helping passenger vehicle drivers to understand exactly what they need to do when they encounter an LAV on a public road.