2020

Final Report:

INVESTIGATING THE FEASIBILITY OF USER PAYS LOADING AND UNLOADING INFRASTRUCTURE

A PROJECT OF THE HEAVY VEHICLE SAFETY INITIATIVE DELIVERED BY THE AUSTRALIAN LIVESTOCK AND RURAL TRANSPORTERS ASSOCIATION

INVESTIGATING THE FEASIBILITY OF USER-PAYS LOADING AND UNLOADING INFRASTRUCTURE

The Australian Livestock and Rural Transporters Association (ALRTA) is pleased to provide this final report to the National Heavy Vehicle Regulator (NHVR) as required under the NHVR Round 3 Heavy Vehicle Safety Initiative (HVSI) Funding Agreement between ALRTA and NHVR.

The report outlines the:

- Objective
- Activities
- Outcomes and
- Expenditure

of this NHVR funded project.

Objective

The objective of this feasibility trial is to demonstrate an innovative cost recovery funding mechanism that overcomes market failure, and to create a business case that incentivises rapid infrastructure improvements throughout the livestock road transport supply chain to deliver a safety outcome.

The trial was designed to test how much transport operators are willing to pay to use an unloading frame, on a per-use basis. The trial aimed to install a stock crate Pivoting Access Landing (PAL) frame at a major processing facility. The purpose and operational requirements of the trial were promoted to operators delivering livestock to the processing facility. Payment and tracking (Avdata) facilities were to be linked.

The data collected via the Avdata system (usage rates at particular price points) and from the host processing facility (daily truck numbers delivering to the facility) has been compiled and analysed to form the basis of a feasibility report (see Attachment A). Other data concerning quantifiable benefits, for example the number of reported safety incidents and a comparison of unloading times, with and without access to the PAL frame, have also been documented and included in that report.

Project activities

1. Execution of a tripartite deed between the project managers, ALRTA, host site, Kilcoy Pastoral Company Ltd (now Kilcoy Global Foods), and the PAL frame supplier, ProWay Livestock Equipment Pty Ltd, on 27 November 2018.
2. Avdata Australia was contracted to provide technical expertise in data collection and analysis, and user charge services.
3. ALRTA representatives conducted an observational survey of the time taken to unload stock crates at the processing facility prior to the installation of the PAL frame.
4. The PAL frame was built on site at Kilcoy in SE Queensland. To improve site conditions a concrete pad was installed at the site in December 2018.
5. ProWay worked over several months to solve the technical issues impeding the operation of the PAL frame. The PAL frame eventually became fully operational in August 2019.
6. A letter was emailed to transport operators known to deliver cattle to Kilcoy Global Foods. Signage was erected on site explaining the user-pays trial and the charging regimen.

7. The planned 12-week user-pays trial ran from 6 September 2019 and extended to 15 December 2019 inclusive. Unfortunately, during this time there was a two-week period where the PAL frame was not operational. The trial saw the usage charge start at $15.00 per use and reduce by $2.50 every two weeks until it was $2.50 per use in the last weeks of the trial.
8. The Assistant Minister for Road Safety and Freight Transport, Scott Buchholz, officially launched the user-pays trial, along with Kilcoy Global Foods Chief Operating Officer, Jiah Falcke, LRTAQ member, Fiona Wild, and NHVR's Sal Petroccitto at Kilcoy Global Foods on 23 September 2019.
9. A news video and project promotional video were recorded at the launch event and can be viewed on YouTube. See https://youtu.be/k3wTAy5aPdM . The video will be a useful resource for future promotion of the installation of safe unloading infrastructure to the livestock supply chain – and, potentially, the user-pays cost recovery approach.
10. ALRTA conducted an observational survey of the time taken to unload cattle at Kilcoy Global Foods when using the PAL frame.
11. User feedback was obtained by phone calls to livestock transport operators and drivers who had used the PAL frame.
12. ALRTA collated data and prepared a business case report on the feasibility of installing user-pays infrastructure on a user-pays cost recovery basis.

Outcomes

The outcomes of the project include:

1. Installation of a safe unloading platform at Kilcoy Global Foods processing facility that reduces the risk of injury to drivers when unloading cattle from stock crates.
2. ProWay designed and constructed an innovative access landing to create a site-specific solution – an unloading frame that moves completely parallel to stock crates rather than pivoting into position. This design may have application in other locations with similar site limitations.
3. Production of a feasibility report outlining the business case for the installation of safety infrastructure on a user-pays cost-recovery basis.

Expenditure

Item	Description	[redacted]
Milestone 1 – Execution of Agreement	Administration charges	
Milestone 2 – Written confirmation of partnership with a major livestock processor	Tripartite deed signed and PAL frame constructed on site	
Milestone 3 – Invoice from PAL supplier	PAL frame purchase	
Milestone 4 – Evidence of the completed installation of the PAL frame and Avdata system	PAL frame built on site and Avdata unit installed onto frame	
Milestone 5 – Ministerial launch concept developed in partnership with NHVR's media team.	Launch event arrangements and promotional video production	
Milestone 6 – Collected data feasibility report provided to NHVR		
Milestone 7 – Expenditure of additional funds for frame design	Power connected and concrete pad installed on site at Kilcoy	
Total		
Funds Remaining		

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted] [redacted]

Signature of Authorised Officer

Signature of witness

[redacted]

Name of Authorised Officer

[redacted] [redacted]

Name of witness (BLOCK LETTERS)

Date: 14 April 2020

INVESTIGATING THE FEASIBILITY OF USER-PAYS LOADING AND UNLOADING INFRASTRUCTURE

14 FEBRUARY 2020

ALRTA
Australian Livestock and Rural Transporters Association

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Investigating the Feasibility of User-Pay Loading and Unloading Infrastructure – a Business Case

Executive summary

Loading and unloading livestock is a high-risk activity, exposing livestock handlers to risks such as falls from heights and crush injuries. High quality infrastructure has the potential to greatly improve productivity and safety for parties in the livestock supply chain, particularly heavy vehicle operators and drivers.

This Australian Livestock and Rural Transporters Association (ALRTA) project, funded by the federal government through the National Heavy Vehicle Regulator (NHVR), demonstrates the viability of a cost recovery funding model that has the potential to incentivise infrastructure improvements throughout the livestock supply chain.

The project trialled

- the installation of a moveable gantry at a cattle processing centre to provide safe access to livestock crates and gates and
- a voluntary user pays system with the usage charge set at different price points over a 12 week period to facilitate the calculation of cost recovery timeframes.

The results show that

- the trend was for usage rates to increase over time as the usage charge decreased.
- a majority of transport operators (i.e. more than 50%) were willing to pay when the usage charge was $10 or less, with more than 62% prepared to pay $5.00 to use the PAL frame.
- efficiency and productivity were not diminished by PAL unloading platform usage.
- full cost recovery within a 4 year timeframe is feasible, estimated at 24 months for a standard Pivoting Access Landing (PAL) frame with a **voluntary payment** of $7.50 per use, and 3 years and 5 months for the more expensive Kilcoy PAL frame, with parallel movement.
- Cost recovery on a **compulsory** basis could occur in as little as 14 months at a usage charge of $7.50 per use. Of course, these estimates are dependent upon the actual cost of installing the PAL frame on a specific site and the number and frequency of livestock trucks delivering to a facility.

Recommendation

Owners and operators of livestock loading and unloading facilities have a realistic opportunity to improve safety and animal welfare outcomes, and reduce their risk exposure, by installing high quality infrastructure. If owners and operators opt to share the costs with users by installing a user-pays system to recover expenditure the estimated timeframe for cost recovery may be 2 - 3 years.

Investigating the Feasibility of User-Pay Loading and Unloading Infrastructure Project Report

About the project

The primary aim of this Australian Livestock and Rural Transporters Association (ALRTA) project, funded by the federal government through the National Heavy Vehicle Regulator (NHVR), is to demonstrate the viability of a new funding mechanism that incentivises rapid infrastructure improvements throughout the livestock road transport supply chain.

The project involved the construction of a state-of-the-art unloading frame at a large livestock processing facility in South East Queensland and the use of technology to monitor and record data usage and apply a charge per use.

Analysis of this information informs this business case, which is focused on the viability of installing safer and more productive infrastructure on a cost-recovery basis at end of journey facilities, such as saleyards and processing centres.

Project results indicate that owners of livestock loading and unloading facilities have a cost-effective opportunity to reduce their risk exposure and improve safety by installing high quality infrastructure, that meets Australian Standards[1], and sharing the costs with its users. As an example, a user-pays system at a facility receiving 23 trucks per day can facilitate cost recovery of the installation of an unloading platform in less than 2 years.

Figure 1. PAL frame constructed at Kilcoy Global Foods

Figure 2. PAL frame signage – the operators guide

Background

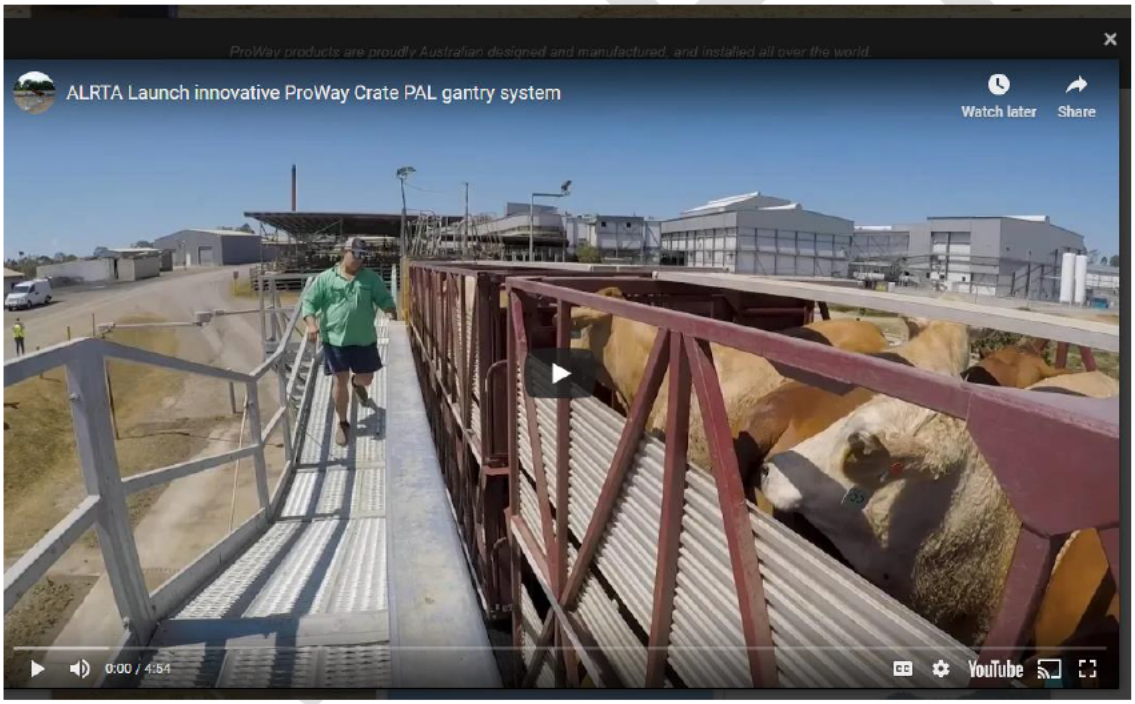
Loading and unloading livestock is a high risk activity. Falls from heights and crush injuries can be fatal. The risk to safety cannot be entirely eliminated because stock handlers are working with live animals. Livestock transport operators typically rely on other parties in the supply chain to provide loading and unloading infrastructure, such as livestock ramps and pivot access unloading frames.

[1] SF-054 – Safe Design of Livestock Ramps and Forcing Yards

High quality infrastructure has the potential to greatly improve productivity and safety for heavy vehicle operators and drivers. Until now, the cost of construction and maintenance of loading and unloading infrastructure has seen many owners provide the bare minimum to meet their own operational and legislative needs. The result is that safety and productivity improvements lag behind what could be achieved if costs were shared more equitably across parties in the livestock supply chain.

The Pivoting Access Landing (PAL) frame, designed by ProWay, is acknowledged by industry as a best practice safety innovation in livestock unloading at high volume destinations. The frame's platforms and gates provide users with safe access to the side panels and gates of livestock crates, keeping people and animals separated. The PAL frame's walkways, stairways and handrails comply with Australian Standards. The platform is quick to engage and disengage and is driven by an electric motor that moves the frame alongside a truck. The PAL frame is designed to be used on level ground with the wheels running on either concrete, bitumen or compacted gravel.

Construction of a PAL frame at Kilcoy Global Foods required a site-specific solution. The main issues were the slope of the driveway into the unloading ramp and that the land available for ramp access was too narrow to accommodate a pivoting gantry. ProWay therefore designed the platform to move in parallel to the side of a livestock crate. The new design had some technical teething problems in execution, and a concrete pad needed to be installed to provide a smooth base for the frame's wheels.



A driver accessing the upper platform on the PAL frame at Kilcoy Global Foods

Avdata was contracted to provide data monitoring and billing services for the user-pays trial. The company supplies these services nationally to truckwash facilities, using a touch key system that enables truckwash owners to control access and record water usage.

The trial process

The user-pays trial was designed to determine whether it is economically feasible for infrastructure owners to pay the upfront capital cost to install safe, high quality infrastructure such as an unloading frame, that users then pay for on a cost-recovery basis, over a reasonable timeframe.

During the trial period use of the PAL unloading platform was voluntary. Work, Health and Safety (WHS) issues were considered, so that the formal advice provided to transport operators, about the PAL frame installation and trial, strongly recommended its use. Accessing this type of infrastructure reduces the risk of injury to workers and animals during unloading by removing the need for drivers to climb on the sides or on the top of crates to unload stock.

The trial was set up to apply a decreasing usage charge over a 12-week period, in order to establish a price point at which transport operators would demonstrate an increased willingness to pay. Commencing on 2 September 2019, with a usage charge of $15.00 (GST inclusive), the rate reduced by increments of $2.50 every two weeks until reaching zero at the end of the trial on 16 December 2019. The planned 12-week period was extended to 14 weeks to enable the collection of 12 weeks of data following a period of 12 and a half days where the PAL frame was not in operation due to a technical glitch. Unfortunately, the period of unavailability may have impacted usage rates for the last two weeks of the trial when the charge was only $2.50. Drivers may not have used the unloading platform as they may have been unsure that it was operational.

Signage explains the user-pays trial period and charges

Set up costs

The total cost of construction of the PAL frame itself was originally $50,283.75 (GST inclusive) [2], which included freight and construction on site. An additional $6,831.00 was required for ProWay to supply and install the components to modify the pivoting design to parallel movement. A further $20,900 was required on the Kilcoy site for construction of a concrete pad, to provide a clear, flat path for the frame's wheels and $3,200 to connect a power supply to the frame site. Installation of operational signage was $132.00. (See an image of the signage in Figure 2. on page 1)

Other costs which may apply to owners (on a case by case basis, depending on what is already available at your site) include: provision of electricity to site (i.e. 20 amp, 3 phase power and an electrician to connect power to the motor); exclusion fencing to the work site during the period of construction; lifting equipment and a competent operator of a forklift or telehandler for unloading the materials and for use during construction; lighting to provide safe operator access at night; supply of concrete for pivot post footing (0.3 cubic metres of 25mpa concrete); location and marking of underground services affected by post footing (600mm wide and 800mm deep), and staff time for site induction.

Another up-front cost is the Avdata unit, installed to facilitate usage charges and data monitoring. It cost $2,873.00 including a master key and freight. Expenditure on Avdata services included $27.50 per month for a SIM card and a fee of 10% of gross income per month for administration, i.e. the processing of user charges and the provision of purified data in an online database.

Note: all costs provided in this report include GST. See the following table.

Cost of PAL frame installation and user charge services at Kilcoy Global Foods

Item	Cost (GST incl)	Notes
Set up costs		
PAL frame	$50,284	Supplied by ProWay Pty Ltd
PAL frame modifications	$6,831	Supplied by ProWay Pty Ltd
Avdata unit	$2,873	Supplied by Avdata Australia and installed by ProWay
Power	$3,520	Supplied by Kilcoy Global Foods
Concrete pad	$20,900	Supplied by Kilcoy Global Foods
Operational signage	$132	Supplied by Kilcoy Global Foods
Subtotal	***$84,540***	
Avdata service maintenance costs		
Avdata SIM card	$83	3 month supply
Avdata services	$878	3 months service
Subtotal	*$961*	
Total	**$85,501**	

What the data shows

The data collected through the Avdata system shows that usage rates gradually increased over time as the charge reduced. Kilcoy Global Foods provided data that indicated an average of 23 trucks unloaded at the processing facility each day during the trial period. Analysis of the data also demonstrates that:

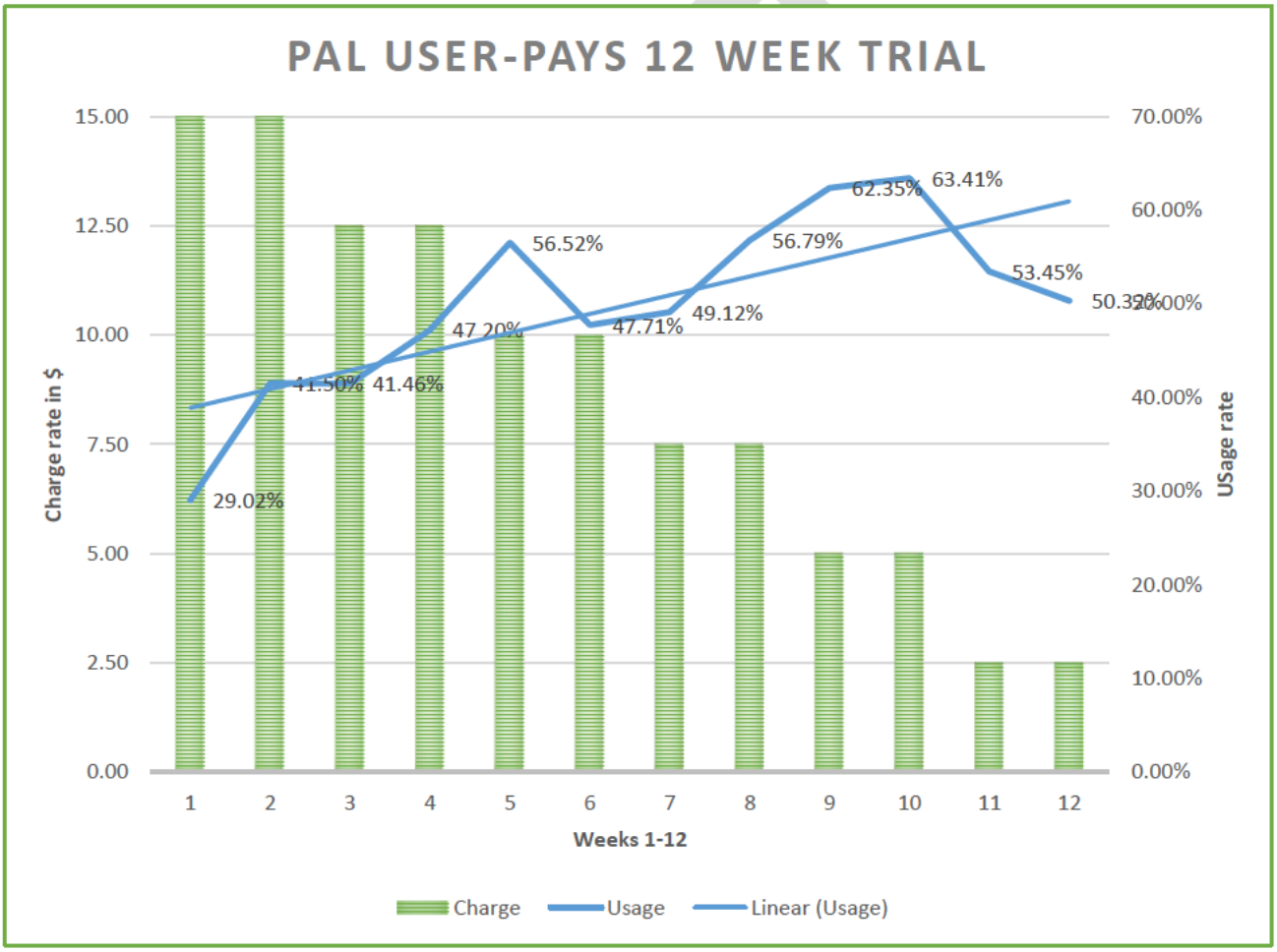
- In the first two weeks of the trial period, when the charge was $15.00 the usage rate gradually increased from 29.02% to 41.50% of trucks delivering to the facility.

[2] All costs quoted are GST inclusive

- The usage rate peaked at 63.41% in the tenth week of the trial when the usage charge had reduced to $5.00.
- The last two weeks of data sees the usage rate drop. The usage rate was most likely affected by the period of time during which the PAL frame was not operating, resulting in drivers losing confidence in its availability for use.

Anecdotally, other factors affecting the usage rate included: driver adaptability; positive word of mouth feedback about the PAL frame's safety and efficiency; and whether drivers had access to an Avdata key (*Note:* most livestock transport operators do have these keys as they are commonly required to access driver and truck wash facilities). Drivers were reported to be more likely to use the PAL unloading frame if they had previously seen it in use and were therefore aware that its use did not significantly affect unloading timeframes.

The usage rates recorded in the trial period are shown in the following table.



Safety

Kilcoy Global Foods reported only one workplace incident when unloading during the trial period, where a driver chose not to use the PAL frame and slipped and fell after climbing on top of a stock crate to get cattle to move out. The driver was not seriously injured.

There have been no WHS incidents reported in relation to use of the PAL frame.

Efficiency

ALRTA conducted two observational surveys of the time taken to unload cattle at Kilcoy processing facility. The first survey was conducted on 14 and 15 November 2018, prior to the installation of the PAL frame, and the second on 13 December 2019 with the PAL frame in operation during the voluntary trial period.

It was noted that the drivers observed in both survey periods appeared experienced and efficient, and the cattle were kept calm. The results of these surveys are inconclusive. The time taken to unload using the frame is apparently neither more nor less than the time taken to unload without using the PAL frame.

In November 2018, before the PAL frame was installed and operational, the time taken to unload varied from 2 minutes to 9 minutes as recorded by the observer. In December 2019 the time taken to unload varied from 8 minutes to 12 minutes for those who did not use the PAL frame and from 9 minutes to 11.5 minutes for PAL frame users. The observer noted that during the first observational survey there were several occurrences when drivers who arrived in close succession helped one another to unload. Whereas, at the time of the second observational survey trucks were not arriving concurrently and so this did not occur.

User feedback

Feedback from drivers who have used the PAL unloading platform at Kilcoy Global Foods.

Maintenance

Feedback from ProWay, based on their experience with facilities in Geelong, Casino and elsewhere is that maintenance costs can be estimated as follows:

- Visual check – 30 minutes, once a month - $480 per year
- Grease bearings – 20 mins 1 every 3 months - $120 per year
- Change oil in gearbox - once every 2 years - $100 i.e. $50 per year
- Electricity -

Cost recovery scenarios

Note: the following assumptions have been made in these scenarios:

- A consistent average number of trucks deliver to the facility (Kilcoy Global Foods receive an average of 23 trucks per day).
- 7 days per week operation for 50 weeks per year (i.e. allowing for a 2 week Christmas closedown period)
- GST, Avdata and LSRI[3] costs remain the same over the cost recovery period.
- No shut down for maintenance or breakdown.
- Maintenance costs as per ProWay estimates i.e. $650 per year plus electricity

Standard PAL frame installation cost	
Item	**Unit cost**
ProWay PAL frame	$41,250.00
Construction on site	$5,940.00
Freight	$3,093.75
Avdata unit	$2,873.00
Signage	$132.00
Total costs are GST inclusive	**$53,288.75**

Or

Actual cost of PAL frame at Kilcoy site	
Item	**Unit cost**
PAL frame	$41,250.00
Construction on site	$5,940.00
Freight	$3,093.75
Extra components for parallel movement	$6,831.00
Concrete pad	$20,900.00
Power	$3,520.00
Avdata unit	$2,873.00
Signage	$132.00
Total costs are GST inclusive	**$84,539.75**

[3] LSRI - a 2% levy collected by Avdata and paid to ALRTA to support Livestock Services Research and Innovations projects

Cost recovery scenarios for a basic PAL frame at $53,288.75

In these first four scenarios the PAL frame cost is $53,288.75, which covers the pivoting PAL frame, freight, construction on site and the installation of the Avdata unit and signage. Pivoting frames currently operate at sites in Geelong and Casino.

The daily income from usage charges is net of GST, plus the 10% Avdata administrative charge, the 2% LSRI contribution and an estimate of maintenance costs (excluding electricity).

Scenario 1 demonstrates the cost recovery period at the first charge point at which more than 50% of drivers unloading at Kilcoy Global Foods were willing to pay to use the PAL frame, which was $10 (GST inclusive). The calculations are based on voluntary usage of the PAL frame.

Scenario 1 - PAL frame cost $53,288.75	**User pays on a voluntary basis**
Potential income based on willingness to pay at this charge point	52.11%
Usage charge	**$10.00**
Average number of trucks per day	23
Gross daily income	$119.84
Daily income less GST payable	$108.95
Daily Avdata costs (ie 10% of income + GST)	$11.98
LSRI levy 2%	$2.18
Estimated maintenance costs	$1.78
Net daily income	**$93.00**
Cost recovery period in days *(assuming 7 days per week operation)*	572.98
Cost recovery period in years *(assuming 2 week Xmas closedown)*	1.63
Cost recovery to be achieved in approximately	**1 year and 8 months**

The result is a cost recovery period of one year and eight months, if an average of 23 trucks per day were delivering to a facility and the facility operated 7 days per week for 50 weeks of the year.

Scenario 1a – PAL frame cost $53,288.75	**User pays on a voluntary basis**
Potential income based on average% usage at this charge point	52.96%
Usage charge	**$7.50**
Average number of trucks per day	23
Gross daily income from # trucks per day	**$91.35**
Daily income less GST payable	$83.04
Daily Avdata costs (ie 10% of income + GST)	$9.13
LSRI levy 2%	$1.66
Estimated maintenance costs	$1.78
Net daily income	**$70.47**
Cost recovery period in days *(assuming 7 days per week operation)*	756.23
Cost recovery period in years *(assuming 2 week Xmas closedown)*	2.15
Cost recovery to be achieved in approximately	**2 years and 2 months**

Scenario 1a demonstrates the cost recovery period at a usage charge of $7.50 (GST inclusive). This charge point was nominated by the majority of respondents to an ALRTA member survey as the point at which they would be reasonably willing to pay to use a PAL frame. In the trial period the usage rate, or willingness to pay, at 52.96% picked up slightly on the usage rate at $10 per use, which was 52.11% of livestock drivers.

The result is a calculated cost recovery period of a little more than 2 years. Again, the calculations are based on voluntary usage of the PAL frame.

Cost recovery scenarios for a basic PAL frame at $53,288.75

Scenario 1b demonstrates the cost recovery period at a usage charge of $7.50 per use (the usage charge considered reasonable by the majority of ALRTA members surveyed) in a situation where use of the PAL frame is made compulsory.

One of the issues that was raised in setting up the trial was Work Health and Safety liability. If a safer way to do things is provided to workers, such an unloading platform, they would reasonably be expected to use it and employers expected to provide for its use.

In this scenario the cost recovery period is calculated to be one year and two months.

Scenario 1b - PAL frame cost $53,288.75	**Compulsory user pays**
Potential income based 100% usage	100%
Usage charge	**$7.50**
Average number of trucks per day	23
Gross daily income from # trucks per day	$172.50
Daily income less GST payable	$156.82
Daily Avdata costs (ie 10% of income + GST)	$17.25
LSRI levy 2%	$3.14
Estimated maintenance costs	$1.78
Net daily income	**$134.65**
Cost recovery period in days *(assuming 7 days per week operation)*	393.75
Cost recovery period in years *(assuming 2 week Xmas closedown)*	1.13
Cost recovery to be achieved in approximately	**1 year and 2 months**

Scenario 1c - PAL frame cost $53,288.75	**Compulsory user pays**
Potential income based on 100% usage	100%
Usage charge	$5.00
Average number of trucks per day	23
Gross daily income from # trucks per day	$115.00
Daily income less GST payable	**$104.55**
Daily Avdata costs (ie 10% of income + GST)	$11.50
LSRI levy 2%	$2.09
Estimated maintenance costs	$1.78
Net daily income	**$89.17**
Cost recovery period in days *(assuming 7 days per week operation)*	597.58
Cost recovery period in years *(assuming 2 week Xmas closedown)*	1.70
Cost recovery to be achieved in approximately	**1 year and 8 months**

In **Scenario 1c** the user charge is set at $5.00. In the user-pay trial this charge point saw a high rate of voluntary usage with 62.88% of drivers willing to pay to use the PAL frame at Kilcoy.

If usage were compulsory at $5.00 per use, the cost recovery period would still be less than two years, calculated to be one year and eight months.

Cost recovery scenarios for the Kilcoy PAL frame (with additional costs) at $84,539.75

In the following four scenarios the PAL frame cost is $84,539.75, which is appreciably more than the cost of a standard pivoting PAL frame. The cost covers the actual cost of the innovative parallel moving PAL frame at Kilcoy Global Foods, plus freight, construction on site, provision of a new access point for electricity, laying of a concrete pad and the installation of the Avdata unit and signage.

The daily income is net of GST, plus the 10% Avdata administrative charge, the 2% LSRI contribution and an estimate of maintenance costs (excluding electricity).

Scenario 2 demonstrates the cost recovery period at the first charge point at which more than 50% of drivers unloading at Kilcoy Global Foods were willing to pay to use the PAL frame, which was $10 (GST inclusive).

The calculated cost recovery period of two years and seven months is based on voluntary usage of the PAL frame.

Scenario 2 – PAL frame cost $84,539.75	**User pays on a voluntary basis**
Potential income based on willingness to pay at this charge point	**52.11%**
Usage charge	$10.00
Average number of trucks per day	23
Gross daily income	$119.85
Daily income less GST payable	$108.96
Daily Avdata costs (ie 10% of income + GST)	$11.99
LSRI levy 2%	$2.18
Estimated maintenance costs	$1.78
Net daily income	**$93.01**
Cost recovery period in days *(assuming 7 days per week operation)*	908.91
Cost recovery period in years *(assuming 2 week Xmas closedown)*	2.59
Cost recovery to be achieved in approximately	**2 years and 7 months**

Scenario 2a - PAL frame cost $84,539.75	**User pays on a voluntary basis**
Potential income based on willingness to pay at this charge point	**52.96%**
Usage charge	$7.50
Average number of trucks per day	23
Gross daily income	**$91.36**
Daily income less GST payable	$83.05
Daily Avdata costs (ie 10% of income + GST)	$9.14
LSRI levy 2%	$1.66
Estimated maintenance costs	$1.78
Net daily income	**$70.47**
Cost recovery period in days *(assuming 7 days per week operation)*	1199.60
Cost recovery period in years (assuming 2 week Xmas closedown)	3.33
Cost recovery to be achieved in approximately	**3 years and 4 months**

Scenario 2a demonstrates the cost recovery period at a usage charge of $7.50 (GST inclusive). This charge point was nominated by the majority of respondents to an ALRTA member survey as the point at which they would be reasonably willing to pay to use a PAL frame. In the trial period the usage rate, or willingness to pay, at 52.96% picked up slightly on the usage rate at $10 per use, which was 52.11% of livestock drivers.

The result is a calculated cost recovery period of three years and four months. Again, the calculations are based on voluntary usage of the PAL frame.

Cost recovery scenarios for the Kilcoy PAL frame (with additional costs) at $84,539.75

Scenario 2b – PAL frame cost $84,539.75	**User pays on a compulsory basis**
Willingness to pay was	**52.11%**
Potential income based on average% usage at this charge point	**100.00%**
Usage charge	$10.00
Average number of trucks per day	23
Gross daily income from # trucks per day	**$230.00**
Daily income less GST payable	$209.09
Avdata costs (daily), (ie 10% of income + GST)	$23.00
LSRI levy 2%	$4.18
Estimated maintenance costs	$1.78
Net daily income	**$180.13**
Cost recovery period in days *(assuming 7 days per week operation)*	469.33
Cost recovery period in years	1.34
Cost recovery to be achieved	**approximately 1 year and 4 months**

Scenario 2b demonstrates the cost recovery period for a PAL at $84,539.75 at the $10 per use charge point, where a facility chooses to make PAL frame use compulsory. In this scenario the total cost of the PAL frame would be recovered in about one year and four months.

Scenario 2c shows that compulsory usage would enable cost recovery of an $84,539.75 PAL frame in around one year and ten months, provided a facility owner were to charge $7.50 per use and there were 23 trucks delivering to the facility 7 days a week for 50 weeks of the year.

Scenario 2c – PAL frame cost $84,539.75	**User pays on a compulsory basis**
Willingness to pay was	**52.96%**
Potential income based on average% usage at this charge point	**100.00%**
Usage charge	$7.50
Average number of trucks per day	23
Gross daily income from # trucks per day	**$172.50**
Daily income less GST payable	$156.82
Avdata costs (daily), (ie 10% of income +G ST)	$17.25
LSRI levy 2%	$3.14
Estimated maintenance costs	$1.78
Net daily income	**$134.65**
Cost recovery period in days *(assuming 7 days per week operation)*	627.84
Cost recovery period in years	1.79
Cost recovery to be achieved	**approximately 1 year and 10 months**

Cost recovery scenarios for the Kilcoy PAL frame (with additional costs) at $84,539.75

Scenario 2d – PAL frame cost $84,539.75	**User pays on a compulsory basis**
Willingness to pay was	**62.88%**
Potential income based on average% usage at this charge point	**100.00%**
Usage charge	$5.00
Average number of trucks per day	23
Gross daily income from # trucks per day	**$115.00**
Daily income less GST payable	$104.55
Avdata costs (daily), (ie 10% of income + GST)	$11.50
LSRI levy 2%	$2.09
Estimated maintenance costs	$1.78
Net daily income	**$89.17**
Cost recovery period in days *(assuming 7 days per week operation)*	948.03
Cost recovery period in years	2.70
0.70 of a year expressed in days	255.5
convert to months	8
Cost recovery to be achieved	**approximately 2 years and 8 months**

In this last scenario, **Scenario 2d**, the users compulsorily pay $5 per use for a PAL frame that initially cost $84,539.75. Cost recovery of the Parallel Access Landing is achieved in approximately 2 years and 8 months.

Conclusion

ALRTA's user-pays trial at Kilcoy Global Foods, demonstrated that sharing the cost with users of installing a pivoting or parallel unloading platform, such as ProWay's crate PAL, by investing in a user-pays system (like Avdata) is a feasible option for recovering capital expenditure.

Owners and operators of livestock loading and unloading facilities therefore have a realistic opportunity to improve safety and animal welfare outcomes, and reduce their risk exposure, by installing high quality infrastructure on a cost recovery basis. A PAL unloading platform provides a safe and efficient method for unloading livestock while minimising the risk of slips, trips, falls, bruising and abrasions, serious injury and loss of life. Unloading facilities that separate people and animals improve animal welfare and have benefits for all the people and businesses in the supply chain who are responsible for managing health and safety for livestock transport activities.

The estimated timeframe for cost recovery of PAL frame installation may be around 2 - 3 years, depending on a range of factors including:

- The initial cost of the PAL frame, which is subject to the specific requirements or limitations of the site
- The number of trucks delivering to the facility and the frequency of deliveries
- The usage charge point
- Whether PAL frame usage is available on a voluntary basis or made compulsory.

Just do it Nike!