# Construction Logistics & Community Safety - Australia

## Final Project Report

**CLOCS-A**
Executive summary
Authored by: National Road Safety Partnership Program

Construction Logistics and Community Safety — Australia (CLOCS-A) is a national voluntary Standard developed with the primary aim of better managing potential hazards created by road transport and logistics activities associated with large construction projects. The Standard has been collaboratively developed by representatives from industry, government, researchers and community associations and funded by the National Heavy Vehicle Regulator's Heavy Vehicle Safety Initiative, supported by the Federal Government.

The aim of CLOCS-A is to reduce the risk of road trauma involving construction vehicles while improving the efficiency and productivity of logistics. Australian governments have committed to an expected $290 billion in public infrastructure investment over the next 10 years. Most of these projects will be in highly populated urban areas, presenting hazards for the public and particularly Vulnerable Road Users (VRU).

There have been a number of VRU fatalities involving construction vehicles over the past decade, with coronial inquests consistently recommending a systems-based approach to avoiding future similar incidents. The systems approach of the CLOCS-A Standard is designed on safer drivers, safe vehicles, safe logistics, and community engagement and awareness of safe interactions with trucks integrated as a contract requirement to operate on major infrastructure projects. As a result, the National Road Safety Partnership Program (NRSPP) has been championing the adaption of Transport for London (TfL)'s Construction Logistics and Community Safety (CLOCS) to Australia since 2016.

Government buy-in in Australia has been driven by the largest public infrastructure construction projects, Sydney Metro and Melbourne Metro, which both reference components of CLOCS in their contract standards. The Commonwealth, New South Wales, Queensland, South Australia and Victoria Road Safety Action Plans also include CLOCS-A as direct actions, signaling to industry that CLOCS-A will soon be an operational requirement to deliver any government-funded infrastructure project.

The foundation of adapting CLOCS-A locally was ensuring strong and diverse leadership, all bound together by a common vision and objective. NRSPP achieved this by developing a Memorandum of Understanding (MoU) establishing a Steering Group and Supporting Partners, who would champion and lead development. A crucial signatory to the MoU was TfL, providing a direct conduit into the development and operational delivery of their CLOCS program.

The project delivered the CLOCS-A Standard with supporting tools, fact sheets, posters, case studies and guidance, a sustainable operational model, charter, audit framework, and transferal from NRSPP to a third party to finalise development and delivery. The third party was identified through a competitive Expression of Interest process, with the Chartered Institute for Logistics and Transport Australia (CILTA) selected.

CLOCS-A was officially handed over to CILTA on 10 July 2023 by a Transfer of Deed facilitated by Monash University. The transfer included seed funding of $300,000 plus GST provided by the Victorian Department of Transport and Planning, Major Transport Infrastructure Authority, Queensland Transport and Main Roads, Transport for NSW and Sydney Metro.

### Background

Since 2016, the National Road Safety Partnership Program (NRSPP) has been championing Transport for London's (TfL) Construction Logistics and Community Safety (CLOCS), which aims to ensure the safest possible construction vehicle journeys and improve efficiency of their deliveries. Evaluation of the program showed the casualty rate almost halved (a 47% reduction) when implementing CLOCS (The Crown Estate, 2018). However, there are significant differences in regulatory requirements between Australia and the United Kingdom, meaning CLOCS would have to be adapted for it to be applied in Australia.

Australia's largest public transport infrastructure construction projects, Sydney Metro and Melbourne Metro, both adapted components of CLOCS to reduce the risk of interactions between construction trucks operating on their projects and vulnerable road users (VRUs). Rather than an ad hoc project-by-project approach, the NRSPP established a Memorandum of Understanding and a diverse Steering Group (SG) to guide the adaption of CLOCS to Australia, known as CLOCS-A.

NRSPP secured funding in Round 6 (2021-22) of the National Heavy Vehicle Regulator's Heavy Vehicle Safety Initiative, supported by the Federal Government, towards developing and delivering the operational establishment of CLOCS-A.

The Standard will be integrated into infrastructure construction contracts, providing certainty to industry on requirements and consistent messaging and engagement for communities. The delivery of the Standard will be governed, managed and audited through a self-sustaining program.

## The Problem: The Human Impact of Trucks and VRU Interactions

Construction projects are temporary, often located in urban areas, and rely on efficient logistics of heavy vehicles. As a result, they require regular truck movements, increasing the risk of VRU interactions and driving over-representation of major city local government authorities in serious injuries and fatalities. Even at a slow speed of 15kmh, for example, an interaction between a VRU and truck can be fatal.

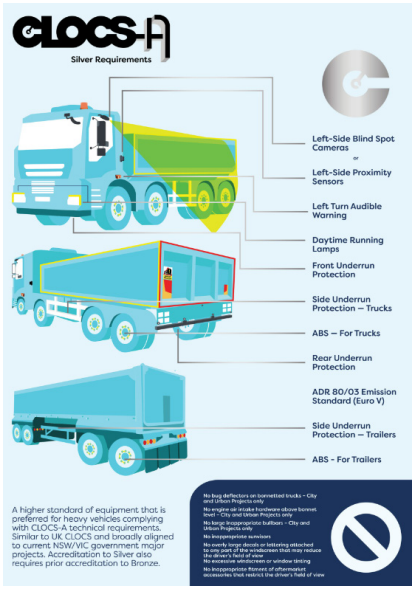
- Key reasons attributed to the increased risk include:
- Many motorists do not understand how to safely interact with a truck and are unaware of truck blind spots, turning requirements, stopping distances and trailer draw bars.
- Poor logistics planning for construction sites may result in truck drivers being unaware of high risk VRU locations.
- A lack of understanding of the vulnerability of cyclists when construction trucks overtake.
- Inadequately-equipped trucks, with poor vision standards or lack of safety technology.

As these risks demonstrate, there is no single solution but rather a systems approach is needed to reduce the risk of a truck and VRU interacting. Sadly, there have been multiple fatalities involving VRUs over the past decade, and it has only been since CLOCS-A was established that there has truly been a concerted effort to reduce the risk. One notable fatality, where Coroner recommendations aligned with addressing these risks, involved a cyclist being hit by a truck during morning peak hour.

## Fundamental Principles Informing Development of CLOCS-A

Several fundamental principles underpinned the approach to developing CLOCS-A, including:

- Construction projects are a standalone event, which can restrict continuous improvement, collaboration and sharing.
- Construction projects often incorporate some form of CLOCS-A in their delivery, just in an ad hoc rather than structured or seamless manner.
- CLOCS-A is not about adding a layer of legislation but rather providing an agreed baseline standard that provides consistency and confidence for industry, regardless of the size of the project or in which jurisdiction it is located. Industry can invest with confidence knowing all CLOCS-A requirements will be the same across major projects.
- Community confidence is crucial, and key stakeholders need to 'see through each other's eyes', that is, truck drivers understanding the risks cyclists face, for example, and cyclists understanding the safety challenges for truck drivers.
- CLOCS-A is about adapting and aligning with what already exists, not 'reinventing the wheel'.
- Road safety is a shared responsibility, and every road user has a role to play.



## The Aims of CLOCS-A

Implementing a national Standard for construction logistics is about simultaneously improving safety, productivity, efficiency and sustainability, with aims including:

- Best-practice management of construction transport safety risks to reduce road trauma.
- Reduce public complaints and build community and stakeholder trust.
- Improve construction delivery efficiencies.
- Single and consistent contract requirement.
- Provide investment confidence to industry.

## The Business Case for CLOCS-A

In 2016, several major infrastructure projects were announced in the heart of Australia's largest cities. Recognising the road safety risk these posed, a global scan by NRSPP identified world's best practice as CLOCS in the UK. NRSPP approached Transport for London (TfL) to share their reasoning, journey and learning in developing CLOCS. This resulted in:

- 2016 – Webinar: CLOCS - Sharing the approach and knowledge with Australia
- 2017 – Webinar: The Fleet Operator Recognition Scheme (FORS)
- 2018 – Memorandum of Understanding (MoU) Between SG for CLOCS-A and TfL for CLOCS and FORS.

The 2018 MoU became the foundation for the development of CLOCS-A, with the original Steering Group consisting of NRSPP, Melbourne Metro, Transport for London and Amy Gillett Foundation (AGF). The MoU acted as a conduit for Australian major infrastructure projects to connect with CLOCS to understand how its requirements were integrated locally into contracts.

NRSPP and AGF received small seed funding from a 2019 HVSI grant towards scoping what a draft CLOCS-A Standard would entail and development of an implementation plan. Following the scoping stage, these insights plus stakeholder consultation formed the foundation for the successful Round 6 HVSI application.

## Government Signals CLOCS-A is now Part of Doing Business on Major Projects

In developing CLOCS-A, government buy-in has been initially driven by Australia's largest public infrastructure construction projects Sydney Metro and Melbourne Metro. Both projects reference components of CLOCS within their contract standards and have consulted with CLOCS in the U.K. However, despite both consulting with CLOCS regarding reducing VRU and truck interaction risk, their contract requirements varied, highlighting the importance of a single standard to ensure contract specification consistency for industry.

Drawing on the leadership of CLOCS-A's development, the program is referenced in the National Road Safety Strategy Action Plan 2023-25 as shown below in Figure 1.

*Figure 1. CLOCS-A reference in the National Road Safety Action Plan 2023-2025*

| Action | By when |
|---|---|
| Mandate that the CLOCS-A standard and/or ISO 39001 Road Traffic Safety Management Systems be applied to Construction projects/programs that are funded by the Australian Government. | Late 2025 |

In addition to this national recognition, New South Wales, Queensland, South Australia and Victoria Road Safety Action Plans include CLOCS-A as direct actions, signaling to industry CLOCS-A will soon be an operational requirement to deliver any government-funded infrastructure project.

## Broadening Stakeholder Leadership and Buy-in

To develop the CLOCS-A Standard, it was crucial to achieve broad scale buy-in from stakeholders and ensure all groups were heard and their feedback included. This process involved the following key elements:

1. Convene diverse leadership of key stakeholders who identified the required deliverables for the CLOCS-A Standard to be successfully developed and implemented.
2. Project governance through an updated MoU (see Figure 2), which was revamped in 2020 to include a

Steering Group (SG) and Supporting Partners (SP). Chaired by NRSPP and Sydney Metro, the SG met monthly and took active leadership roles in the project.

3. Project promotion and engagement seeking input on how to adapt CLOCS to Australia through an open webinar drawing on industry leaders to champion the process and why it was needed. The webinar featured:
    a. How TfL used their major infrastructure projects to establish CLOCS, the benefits to industry, government and the community, outlined by TfL's Peter Binham
    b. How Sydney Metro adapted CLOCS into its safety standards and contracts, outlined by Jon Lamonte, Sydney Metro Chief Executive
    c. What safety standards in project contracts represent to Hanson, by Scott Tipping
    d. The adaption of CLOCS' Sharing Roads Safely education program for truck drivers, outlined by Amy Gillett Foundation's Dr Marilyn Johnson.
4. Establishing four open Technical Groups (TG) led by representatives from the SG, with each group developing their own Terms of Reference, key deliverables, resourcing and timelines.
5. Clear planning of timelines, consultation periods and virtual consultative workshops held at key milestones:
    a. Project Planning
    b. Standard Consolidation
    c. Closing Workshop – Governance and Audit Framework.
4. Monthly CLOCS-A Newsletter.
5. Bimonthly meetings with CLOCS.
6. Developing case studies featuring leadership and good practice and illustrating examples of where forms of CLOCS-A have already been applied. The case study template was adapted from Sydney Metro contract requirements.

### The Power of Contracts

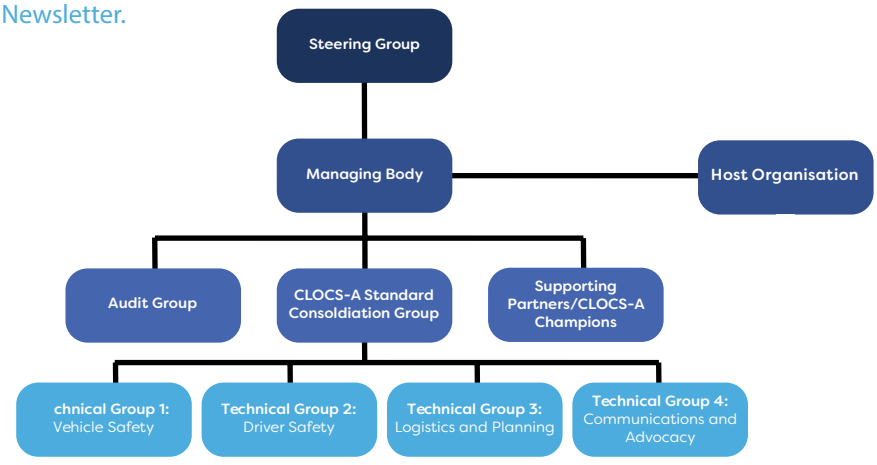
One of the most effective and powerful levers in influencing safety is stipulating specific requirements and conditions in a contract. Should these requirements not be met, the supplier is in breach of the contract and can have the contract terminated.

This is particularly powerful for major Tier 1 infrastructure construction projects, as suppliers will be penalised if they don't meet all contract requirements. A key issue this project came to understand was that as Tier 1 construction companies are not transport operators, they may find it difficult to understand how to meet requirements. With CLOCS-A now established and being referenced as a delivery condition for major construction project tenders, the Tier 1 companies will have to ensure their CLOCS-A projects are accredited, as are any logistics-related supplier.

The Tier 1 construction companies also have the confidence that CLOCS-A having its own audit regime means that sub-contractors and logistics suppliers will all meet the required standard.

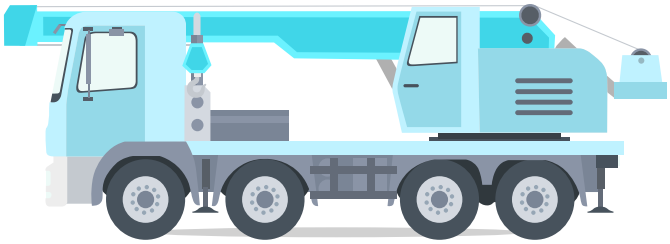
The other major incentive for industry is if the company does not meet the CLOCS-A tier as per the contract they will not even be considered for the contracts.

*Figure 2: CLOCS-A MoU Project Governance Model*



## Recognising Differences Between Australia and U.K.

In adapting the U.K.'s CLOCS to Australia, the differences between the U.K. and Australian standards had to first be identified. Identified differences were not only in the CLOCS standard but in general regulations that are standard in the U.K. and European Union but not in Australia. Some key examples documented were:



### Key Differences between UK and Australian vehicles and their standards!!

CLOCS-A is a national road safety program targeting transport and logistics related risks from major infrastructure projects. CLOCS-A is inspired by the success of the CLOCS Program that Transport for London established to tackle the same challenges now faced in Australia with the $200 billion worth infrastructure projects in the pipeline.

CLOCS is now the UK's only safety standard for construction logistics and recognised as best practice. However, in adapting CLOCS to Australia there are a number of differences between the UK and Australia which are summarised below (current as at 2 August 2021):

| Area | Australia | UK |
|---|---|---|
| Driving licences | Above 4.5t GVM requires an endorsement (VicRoads)<br>· Light Rigid (LR)<br>· Above 4.5 t->8t requirement of 12 months car driver<br>· Medium Rigid (MR) Above 8 t with only 2 axles requirement of 12 months car driver<br>· Heavy Rigid (HR) Above 8t with 3+ axles requirement of 24 months car driver<br>· Heavy Combination (HC) Truck and 1 trailer requirement of 12 months HR plus 24 months car driver<br>· Multi Combination (MC). Larger combination requirement of 12 month HC | Above 3.5t GVM requires an endorsement<br>· Medium 3.5 to 7.5t<br>· Large over 3.5t |
| Overall Width | 2.5m with 50mm exemption for load restraint systems | 2.55m with exemption for load restraint systems and 2.6m for refrigerated bodies (hard sides) |
| Overall Height | 4.3m<br>4.6m | 4.0m |
| Axle Masses (t) | Front — 6.5 with Euro IV Emissions<br>Single drive — 9 (GML)<br>Tandem drive — 17 (HML) | Front 7.1<br>Single drive 11.5 drive<br>Tandem drive — 19 (HML) |
| GCM (t) example | 45.5 (HML) for 6 axle semi | 44.0 for 6 axle semi |
| Combinations (typical) With Overall length (m) | Construction<br>Truck — 3 to 6 dog trailer<br>Distribution<br>6 axle Semi for 19 or 20.<br>9 axle B-Double for 26.<br>11 axle A-Double for 30.<br>Road trains in remote areas<br>In a **curtain side** configuration | Construction<br>Truck – 3 or 4 axle heavy rigid<br>Distribution<br>6 axle semi for 16.5 semi<br>or 18.75 draw bar "lorry".<br>In a **hard sided** configuration |

Acknowledgments: Chris Loose Truck Industry Council

Current as at 2 August 2021 | 1

## CLOCS-A Stakeholders

A critical success factor for CLOCS-A was identifying its key stakeholders and having them actively involved and contributing to its development. As referenced in Figure 1 above, the technical groups were limited to those specific to that knowledge sector. For example, TG1 – Heavy Vehicle Safety included representatives from Bicycle NSW and e-scooter provider Lime with Truck Industry Council. The stakeholder groups were split into six groups:

**Government + Regulators**

State and federal government bodies involved in forming regulations for vehicle and road safety and construction.

**Developers + Project Providers**

Organisations who fund and manage the development of new infrastucture.

**Vehicle + Transport Operators**

Construction companies operating vehicles and transportation companies working on contruction sites.

**Community + Local Government**

Local government and members of the public who have an interest or stake in the safe operation of vehicles operating in the community.

**Primary Contractors**

Organisations that take on a lead role in the construction and delivery of infrastructure projects.

**Industry Groups**

Groups and organisations representing various sectors of the construction and transport sector.

## The CLOCS-A Standard

The development of the CLOCS-A Standard was coordinated by the SG Chair and Deputy Chair through the SG and the various TGs. Each TG contained subject matter expertise to ensure all material developed aligned with industry good practice. The TG approach was strengthened through diversity, with community and peak association representation in addition to subject matter expertise to ensure there was a balanced approach to what was developed.

One issue that emerged was the difference in VRU exposure to infrastructure construction projects across Australia. For example, predominately rural and regional areas may have little if any VRU exposure on their project logistics. For this reason, it was decided that a risk-based approach be applied to assessing construction project sites within the CLOCS-A Standard, which would then be applied to the logistics supplying that site. This resulted in three CLOCS-A tiers being created:

- Bronze – Must haves
- Silver – Should haves
- Gold – Nice to haves.

The tiers were adapted for vehicle, driver, logistics and communications depending on the risk, as show in Figure 3 for heavy Vehicles.

Having three tiers will also assist with the continual improvement of the Standard over time, which is built into the Charter and Standard to occur every two years coordinated through the consolidation technical group and in conjunction with CLOCS. The renewal process will involve elements of gold moving to silver and silver to bronze. This approach also gives companies confidence to invest in newer equipment, knowing that if they purchase a new truck with gold level features these will remain current for at least several years through to Bronze.

*Figure 3: Heavy Vehicle Safety Standards - Summary*

**CLOCS-A Standard Bronze**
Must haves

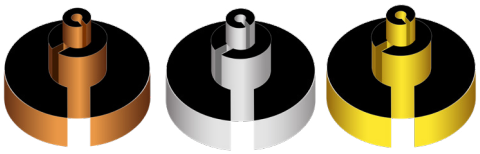
Cab accessories
Class V and VI mirrors
Fresnel lens
Reversing cameras
**OR**
Reversing sensors
Reverse beepers
Amber beacons
Conspicuity marking
Drawbar colour
Warning signage
Wheel-nut indicators

**CLOCS-A Standard Silver**
Should haves

Left-side blind spot cameras
**OR**
Left-side proximity sensors
Left turn audible warning
Day run lights
Front Underrun Protection
Side Underrun Protection - Trucks
Side Underrun Protection - Trailers
Rear Underrun Protection
Euro V Emission Standard
ABS - for trucks
ABS - for trailers

**CLOCS-A Standard Gold**
Nice to haves

Telematics
Roll Stability Control (Trailers)
Electronic Stability Control (Trucks)
Advanced Emergency Braking
Lane Departure Warning
Autonomous Reverse Braking
Euro VI Emission Standard
**OR**
Zero Emission Vehicle



**Restrictions**

- No bug defletors on bonneted vehicles
- No engine air intake above bonnet level
- No large inapporpriate bull bars
- No inappropriate sunvisors
- No overly large decals or lettering attached to any part of the windscreen that may reduce the dirver's field of view
- No excessive windcreen or window tinting
- No inappropriate fitment of aftermarket accessories that restrict the driver's field of view

## Project Rating Tool

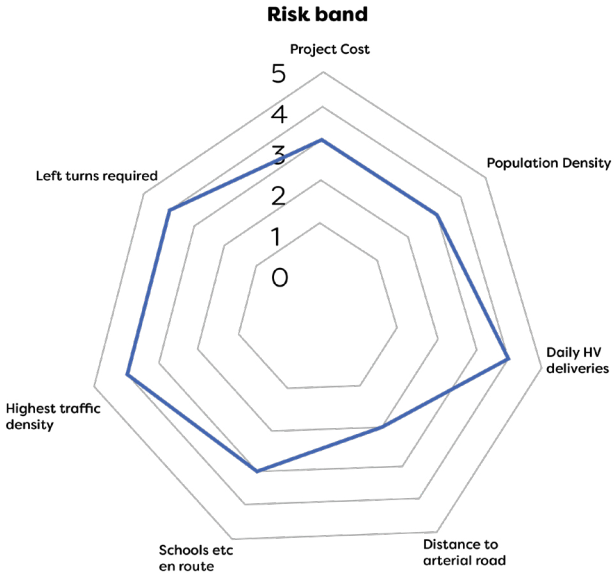
A construction project site will be given a rating on entering the CLOCS-A scheme, and the various participants in that project will nominally require CLOCS-A accreditation at that level or higher. CLOCS-A developed a tool that provides this initial rating for individual infrastructure projects and is required to facilitate this process.

The Site Risk Assessment Tool uses seven readily available variables categorised into five measures for project sites to use to understand what tier their project will be rated as. Figure 4 shows the assessment criteria, with the results produced shown in Figure 4.

*Figure 4. CLOCS-A Site Risk Assessment Tool*

| | Measures | | | | |
|---|---|---|---|---|---|
| **Project Variables** | **1** | **2** | **3** | **4** | **5** |
| Total project cost | 0 to $5m | $5m to $50m | $50m to $500m | $500m to $1b | > $1b |
| Usual Resident Population (URP) density (people / km²) in the 1 square km area of land surrounding the project site entrance | < 500 | 500 to 2,000 | 2,000 to 5,000 | 5,000 to 8,000 | > 8,000 |
| Average daily number of HV visits into the project site | < 10 | 10 to 25 | 25 to 50 | 50 to 100 | > 100 |
| Distance (along the approved route) from the project site entrance to an arterial road or highway | < 0.5kms | 0.5 to 1.0 kms | 1 to 2 kms | 2 to 5 kms | > 5kms |
| Number of the following items on the last 5km of the approved route(s) to the project site entrance:<br>• School zones<br>• Pre-schools or childcare centres<br>• Pedestrian crossings<br>• Shopping centres<br>• Sporting Fields | 0 | 1 to 3 | 4 to 6 | 6 to 10 | > 10 |
| Highest (2-way) traffic density (vehicles / day) on any section of road in the last 1km of the approved route to the project site entrance | < 500 | 500 to 3,000 | 3,000 to 10,000 | 10,000 to 50,000 | > 50,000 |
| Number of intersections within the last 5kms of the prescribed route into and out of the project site entrance that will require a left turn by a heavy vehicle | 0 | 5 to 10 | 15 to 20 | 20 to 25 | > 25 |

*Figure 5. CLOCS-A Risk Band Assessment*




## CLOCS-A Driver Training

As part of the CLOCS-A Standard, minimum training and competency requirements are specified for heavy vehicle drivers of construction vehicles to meet before the organisation (and project) they work for can gain accreditation to the CLOCS-A Standard.

Empathy of other road users was identified in CLOCS as one of the foundation components for improving safer driving behaviour. Since CLOCS-A is centred on safer interactions between trucks and VRUs, the CLOCS-A Standard includes specific guidance on the level of training required per tier, as shown in Figure 6.

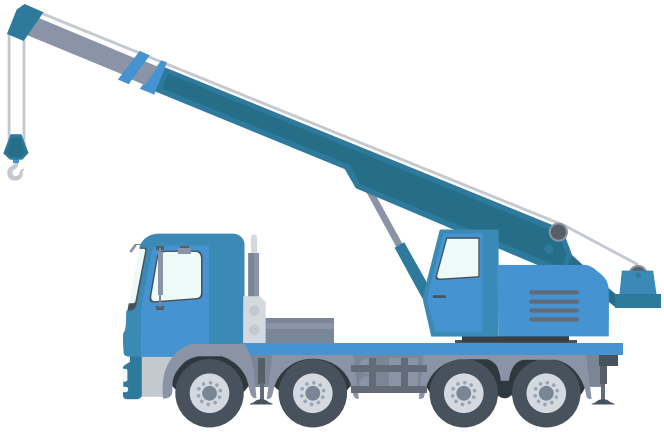
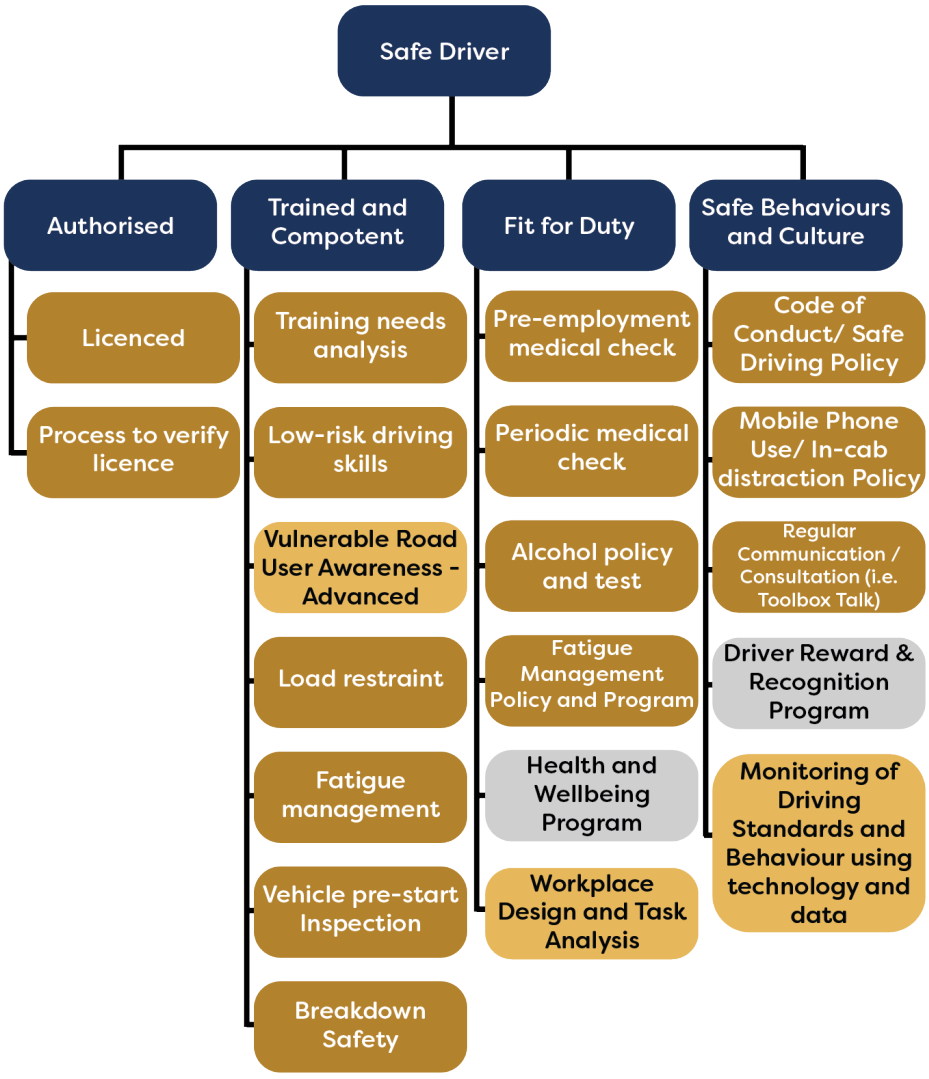


*Figure 6. Driver Training Requirements by Tier*



As part of these requirements, heavy vehicle drivers are required to complete training in and gain a competency in "Vulnerable Road User Awareness". CLOCS developed CLOCS-A Vulnerable Road User Awareness Course Requirements and Guidance for Training Providers to provide the necessary guidance for training organisations to develop suitable CLOCS-A VRU training material appropriate for each CLOCS-A tier and the assessment and certification process to be recognised CLOCS-A and registered on its website Suppliers Page. The accreditation level requirements are outlined below in figure 7.

*Figure 7. Vulnerable Road User Awareness Training Requirements per Accreditation Level*

| Accreditation Level | Training Requirement | Knowledge/Content/Assessment | Accessible Delivery Methods |
|---|---|---|---|
| Bronze | Vulnerable Road User Awareness Training - Basic | • Introduction to the Safe System<br>• Growing population and construction<br>• Introduction to different road user types<br>• Introduction to different vulnerable road users, level of vulnerability and associated risks<br>• Common hazardous scenarios, crash types with vulnerable road users<br>• Overview of driving techniques and skills (e.g. scanning, buffering, etc.) to anticipate and share the road safely with VRUs, including trusting in driver's own awareness<br>• Overview of vehicle safety standards (CLOCS-A) Bronze, Silver, Gold - their purpose, function, and limitations (including crash reduction factors)<br>• Overview of route planning and its influence on road safety (i.e. to avoid locations/times where VRUs are likely to be present)<br>Assessment: Multiple choice individual assessment required | • In-house facilitation using handouts/PowerPoint-style or via eLearning-style module |
| Silver | Vulnerable Road User Awareness Training - Intermediate | As per Bronze Requirements.<br>In addition:<br>Interactive group discussion activity and additional assessment requirements.<br>Assessment:<br>• As per Bronze requirements, plus<br>• Group Activity<br>• Short Answer Exam-style Questions | • In-house facilitation using handout/PowerPoint-style or via online platform (MS Teams, Zoom, etc.) |
| Gold | Vulnerable Road User Awareness Training - Intermediate | As per Silver Requirements.<br>In addition:<br>• Provide driver opportunity to understand limitations to existing infrastructure and existing infrastructure and construction impacts on traffic and road environments in practical real-life environment.<br>• Drivers can explore first-hand how to feels to be a vulnerable road user.<br>• Improve health through increased active transport.<br>Assessment:<br>• As per Silver Requirements, plus:<br>• Practical assessment and in-field observations | • In-house facilitation using handout/PowerPoint-style or via online platform (MS Teams, Zoom, etc.)<br>• Practical site visit involving walking tour of project haulage routes, on-bike tour or an equivalent practical or simulated experience |

### Toolbox Talks

The Victorian Department of Transport and Planning, in collaboration with NRSPP, developed three Toolbox Talks (TBT) to assist with training drivers in interacting with VRUs and will allow CLOCS-A to utilise them. The TBT development methodology utilised the NRSPP's Heavy Vehicle Toolbox Talk approach which also feature on the CLOCS-A website, focusing on:

- Blind Spot
- Cyclists
- Pedestrians.

The aim will be to develop an Urban Driving and Vision perception Toolbox Talks in due course.

### Auditing Framework

CLOCS does not include an Auditing Framework as part of the program, it is instead a module within the silver tier of the Fleet Operators Recognition Scheme. The CLOCS-A Standard sets out the minimum requirements and specifications for key stakeholders involved in a construction supply chain to achieve the CLOCS-A Standard's bronze, silver or gold accreditation, with accreditation only awarded once an organisation has passed an external verification audit.

Organisations seeking to remain accredited to the CLOCS-A Standard need to demonstrate ongoing achievement of the Standard's elements by successfully passing the biennial self-assessment and audit process.

The CLOCS-A program has developed its own Audit and Accreditation Business Rules and Standards, which will underpin the Standard and be managed by the Host Entity.

A key requirement of the governance of CLOCS-A, as agreed with TfL and CLOCS, is auditors of the Standard must be appointed and paid by the CLOCS-A Program Host. This will guarantee the independence and quality of audits.

### Design, Communication and Good Practice Engagement

The CLOCS-A project was keen to provide clarity, consistency and confidence around development of standards, rather than leaving it open to member interpretation. This was achieved by developing a strong fresh brand, supported by a broad range of tools and guidance, to make CLOCS-A easily identifiable.

This was achieved via Swinburne University Design Bureau, who worked closely through TG4: Communications to identify and group key CLOCS-A stakeholders and then design content specifically targeted to the various stakeholder groups. To assist and ensure construction projects actively engage with the community, they are required to follow CLOCS-A Good Practice Community Engagement, utilising a range of supporting engagement posters and guidance material. The aim is for CLOCS-A to become an established brand in the community, which will contribute to raising awareness of construction project logistics and associated risks and where the community can direct concerns and complaints about poor or dangerous behaviour.

As community awareness of safe interactions with heavy vehicles is a crucial component of CLOCS-A, a Communications Evaluation Framework has also been developed to assist with performance reporting of the program.

To illustrate that many elements of CLOCS-A are already in operation, TG4 developed eleven case studies, which feature examples of leadership and good practice. Three case studies have been published and the others are pending approval for release. The case study template was adapted from Sydney Metro contract requirements.

### Transfer of CLOCS-A to its New Operational Host – CILTA

- The final stage of the project was identifying a new host to transfer CLOCS-A to. For this to occur, the SG developed a Charter and Fee Structure that would ensure the program was properly governed and sustainable. To identify a new host, an Expression of Interest - CLOCS-A was developed and issued through the Austroads Tender Net. A selection committee was formed by the SG, which reviewed the three applications received and following due diligence CILTA was selected.

CLOCS-A was officially handed over to CILTA on 10 July 2023 from the NRSPP by a Transfer of Deed facilitated by Monash University. The transfer included seed funding of $300,000 plus GST provided by the Victorian Department of Transport and Planning, Major Transport Infrastructure Authority, Queensland Transport and Main Roads, Transport for NSW and Sydney Metro.

## Acknowledgements

### Steering Group Members

acciona
ARTSA-i INSTITUTE
The Chartered Institute of Logistics and Transport
VICTORIA State Government | Department of Transport and Planning
HSE Global HEALTH | SAFETY | ENVIRONMENT Making a Difference Every Day
MAJOR TRANSPORT INFRASTRUCTURE AUTHORITY
McCONNELL DOWELL CREATIVE CONSTRUCTION™
NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM
NSW GOVERNMENT
sydney METRO
TIC TRUCK INDUSTRY COUNCIL TODAY'S TRUCKS SAFER GREENER ESSENTIAL
Transport for London

### Supporting Partners

Amy Gillett FOUNDATION Safe together
arrb
ATA AUSTRALIAN TRUCKING ASSOCIATION
BAW BAW SHIRE COUNCIL
bicycle NSW
BQ BICYCLE QUEENSLAND
BINGO INDUSTRIES
CICA The Crane Industry Council of Australia
GRASS HOPPER™
Hanson HEIDELBERGCEMENT Group
LAING O'ROURKE
Lime
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