Log Haulage Manual & Video Project - Final Report

HVSI 740

Table of Contents

Acknowledgements

ForestWorks acknowledges the valuable contributions of the following organisations and individuals to the Log Haulage Manual & Videos Project. The National Heavy Vehicle Regulator (NHVR) provided funding through the Heavy Vehicle Safety Initiative (HVSI) and ongoing technical guidance.

Strategic oversight and input were provided by the Project Steering Committee (PSC) with representatives from the Australian Forest Products Association (AFPA), the Australian Forest Contractors Association (AFCA) and NHVR. A Subject Matter Expert Working Group (SMEWG) supplied technical expertise and validation throughout.

ForestWorks thanks Mitchell Hodge Studio for production of the educational video series, and participating forestry contractors, transport operators and Registered Training Organisations (RTOs) for their input during consultations and resource development.

Executive Summary

The HVSI 740 – NHVR Log Haulage Manual and Videos Project, delivered by ForestWorks and funded through Round 7 of the National Heavy Vehicle Regulator's Heavy Vehicle Safety Initiative, was established to meet the sector's need for updated, practical safety resources that align with the Forestry Log Haulage Code of Practice. The project responded to industry feedback, regulatory developments, and engineering reassessments that highlighted limitations in the 2014 Log Haulage Manual and the need for modernised guidance materials and training tools.

The project produced two core outputs: a revised Log Haulage Manual and a suite of three educational videos that provide practical guidance for drivers, forestry workers, and training organisations. These resources support industry in understanding and applying safety obligations under the Heavy Vehicle National Law and Workplace Health and Safety legislation. They incorporate technical content shaped by engineering analysis, subject matter expertise, and comprehensive stakeholder consultation.

A structured engagement model supported the development of these materials, including the Project Steering Committee and a Subject Matter Expert Working Group. Their contribution ensured the technical accuracy and relevance of safety messaging throughout the project.

During development, delays in the finalisation of the National Log Haulage Code affected the original launch timeline, including planned presentations at AFPA and AFCA events. To ensure strong industry engagement, despite these timing constraints, a revised launch strategy was implemented. This strategy involved delivering two dedicated webinars: a Finalisation Webinar to introduce stakeholders to the desktop-published version of the manual, and a Launch Webinar to release the completed manual and video series to industry. These sessions were held in January and achieved strong participation, with 40 attendees at the Finalisation Webinar and 24 attendees at the Launch Webinar. This approach was supported through email communications, newsletter updates, and LinkedIn promotion. A recording of the Finalisation Webinar was also placed on the ForestWorks website for stakeholders who were unable to attend.

These measures ensured effective dissemination and supported broad industry awareness and adoption of the project's outputs.

Final project materials are hosted on the ForestWorks website and available for ongoing use by drivers, RTOs, contractors, and managers. The report outlines the project's achievements and contributions, including evaluations of project effectiveness, stakeholder engagement, risk management, and lessons learned. Through its development of nationally aligned and freely accessible safety resources, the project is expected to make a lasting contribution to improved safety outcomes across the forestry haulage sector.

Project Success

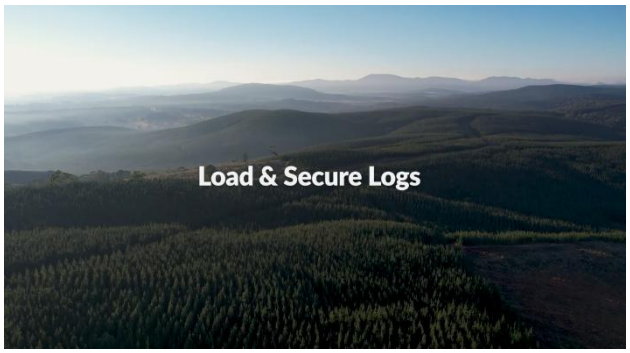
The HVSI 740 – NHVR Log Haulage Manual & Videos Project has delivered meaningful outcomes that respond directly to identified safety and training needs within the forestry haulage sector. Through the development of a Log Haulage Manual for the Code of Practice and a suite of educational videos, the project has provided practical tools that support industry alignment with the updated Log Haulage Code of Practice. These resources were shaped by extensive consultation with subject matter experts, industry associations, and training organisations, ensuring they reflect current operational realities and safety expectations.

The project was designed to produce not only high-quality materials, but also to foster broad engagement and sector-wide ownership. The following sections outline how the project has achieved its intended goals and the impact of its delivery.

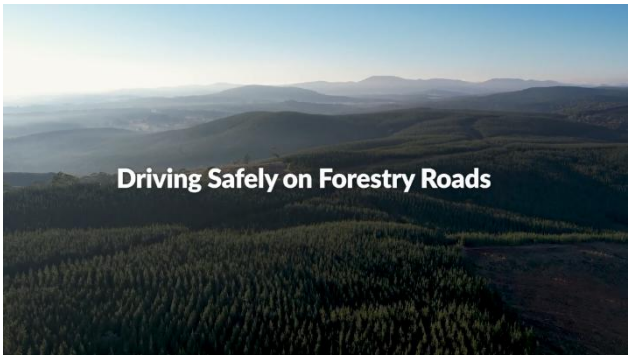
Project Resources

The following materials were developed as part of the HVSI 740 – NHVR Log Haulage Manual & Videos Project. They are designed to support safer practices in forestry log transport and provide accessible, practical guidance aligned with the updated Log Haulage Code of Practice. These resources are freely available and intended for use by drivers, trainers, contractors, and training organisations across the sector. Videos can be accessed on the ForestWorks website under: Log Haulage Training Videos - ForestWorks.

Video 1: Load & Secure Logs



Video 2: Driving Safety on Forestry Roads



Video 3: WHS for Forestry Log Haulage Drivers

Log Haulage Manual

The NHVR Log Haulage Manual for the Code of Practice is designed to support forestry workers, drivers, and businesses involved in transporting logs. It outlines the key safety responsibilities under both the Heavy Vehicle National Law (HVNL) and Workplace Health and Safety (WHS) legislation. The manual explains how these laws apply to everyday forestry operations, with a focus on the Chain of Responsibility and the Primary Duty, which require all parties in the supply chain to take reasonable steps to ensure safety.

It provides clear guidance on what employers and workers must do to meet their legal obligations, including managing risks and maintaining safe work practices. The manual also covers five main areas of safe working: the workplace environment, fitness for work (including fatigue and substance use), vehicle safety and maintenance, proper loading of logs, and planning safe journeys. These sections aim to help reduce incidents and improve safety outcomes across the industry.

The manual works alongside the Forestry Log Haulage Code of Practice, which offers more detailed advice on identifying hazards and controlling risks. Together, these resources help ensure that log haulage is carried out safely and in compliance with national regulations.

Effectiveness

The project's effectiveness is evident in the successful development and release of two core resources: the updated Log Haulage Manual for the Code of Practice and a series of three educational videos. The manual was revised to reflect best practices in load restraint, safe driving on forestry roads, and workplace health and safety. It incorporates feedback from technical experts and stakeholders, including adjustments informed by engineering analysis conducted by NHVR and Smedley's. The result is a nationally consistent guide that supports safer log transport and clearer understanding of compliance requirements.

The video series complements the manual by providing visual, scenario-based training on key safety topics. These include load restraint, load shift and loss of control, fatigue management, static rollover threshold, and manual handling. Filmed in realistic operational settings, the videos are designed to be accessible and engaging, supporting both new and experienced drivers in applying safe practices.

Together, the manual and videos offer free, high-quality resources that are already being used by forestry and transport businesses. They support alignment with the Log Haulage Code of Practice and contribute to reducing unsafe practices, improving safety awareness, and enhancing training delivery across the sector.

The project also supports national consistency in training. By aligning with the unit of competency *FWPCOT3315 – Transport forestry logs using trucks*, the resources assist Registered Training Organisations (RTOs) in delivering standardised instruction. This alignment strengthens the overall training framework and promotes a uniform understanding of safety practices across Australia.

Project Evaluation

The project was delivered through a structured and collaborative process that ensured strong stakeholder engagement and technical integrity. A Project Steering Committee, comprising representatives from NHVR, AFPA, and AFCA, provided strategic oversight, while a Subject Matter Expert Working Group contributed detailed input throughout development. This inclusive approach fostered sector-wide ownership and helped ensure the relevance and uptake of the final resources.

During development, several unexpected outcomes emerged. Engineering testing revealed that specifications in the original 2014 ForestWorks manual did not align with the updated Code, prompting necessary revisions to both the manual and video content. Additionally, delays in the finalisation of the Code

impacted the project's launch timeline, requiring adjustments to the communications strategy and resulting in missed opportunities to present at key industry events.

Although formal safety data was not available at the time of reporting due to the timing of resource completion, the materials are expected to contribute to measurable improvements. The manual and videos address high-risk areas such as inadequate load restraint, fatigue-related driving errors, manual handling injuries, and low-speed turning risks. By providing clear, practical guidance in both written and visual formats, the resources are anticipated to reduce incidents, improve driver preparedness, and support safer heavy vehicle operations.

In summary, the project has delivered high-impact, nationally aligned safety resources that are expected to make a lasting contribution to the forestry haulage sector. Through expert input, stakeholder collaboration, and targeted content development, the initiative equips industry participants with the tools needed to promote safer practices and support compliance with evolving regulatory standards.

Project Management Evaluation

Overall

The Log Haulage Manual & Videos Project was managed by ForestWorks Ltd using a structured, milestone-based approach aligned with the NHVR's HVSI funding framework. The project demonstrated strong governance, strategic stakeholder engagement, and adaptive planning, ensuring that key deliverables were achieved and challenges were addressed constructively.

Governance was a central feature of the project's success. A Project Steering Committee (PSC) was established early, comprising representatives from NHVR, AFPA, and AFCA. The PSC provided strategic oversight, reviewed progress, approved content, and supported risk management throughout the project lifecycle. In addition, a Subject Matter Expert Working Group (SMEWG) was engaged to guide technical content and ensure the accuracy and relevance of safety messaging in both the manual and video resources.

A key project variation was the change from five short videos, as originally outlined in the funding agreement, to three longer videos. This change was proposed by the PSC Subgroup and formally approved by the NHVR, as recorded in the PSC meeting minutes of 15 March 2023. The approval was confirmed by NHVR representative Jennifer Rotili and accepted as accurate in the subsequent PSC meeting on 25 July 2023.

ForestWorks applied a stage-based delivery model, dividing the project into six clearly defined phases: Planning, Ongoing Engagement, Documentation Development, Product Finalisation, Marketing and Launch, and Final Reporting. Each stage had specific deliverables and timeframes, with progress tracked through quarterly reports and supported by clear internal planning and coordination.

Project coordination was led by ForestWorks, with day-to-day operations managed internally and supported by external contractors. ForestWorks senior management provided executive oversight, authorised project variations, and ensured timely submission of formal progress reports to NHVR. External partners, including Mitchell Hodge Studio and Australian Trucking Safety Services & Solutions (ATSSS), contributed to the production of the educational video series, working closely with ForestWorks to meet creative and technical requirements.

Risk and issue management was handled proactively. The project team responded to timeline variations resulting from health-related disruptions and delays in the finalisation of the National Code. Adjustments were made to stakeholder engagement schedules and launch planning, with NHVR kept informed

throughout. Communications and reporting were consistent, with quarterly updates submitted as required, including financial disclosures and commentary on deliverables and risks.

In summary, ForestWorks demonstrated a high level of professionalism and adaptability in managing the project. Despite external challenges, the team-maintained momentum, delivered quality outputs, and upheld strong governance and stakeholder engagement. The overall approach reflects ForestWorks' commitment to collaboration, transparency, and the delivery of practical safety resources for the log haulage sector.

Risk Management

Throughout the lifecycle of the Log Haulage Manual & Videos Project, ForestWorks demonstrated a proactive and responsive approach to managing risks that could have impacted delivery, stakeholder engagement, and alignment with the National Log Haulage Code. Several challenges emerged, and each was addressed through clear communication, strategic adjustments, and collaboration with NHVR and other stakeholders.

One of the early risks involved resourcing disruptions due to illness. The Project Manager experienced health issues that affected scheduled activities, including mapping work and stakeholder meetings. ForestWorks responded promptly by informing NHVR, revising the project timeline, and securing approval for a formal variation to extend the project deadline. This ensured continuity and maintained transparency with all parties.

Delays in the finalisation of the National Log Haulage Code also posed a significant risk to the timing and accuracy of the manual and video content. ForestWorks managed this by maintaining regular consultation with NHVR and adapting the sequencing of project activities. NHVR confirmed that content could be based on the draft code, with minor edits to follow once the final version was released.

Access to intellectual property from the original 2014 manual presented another challenge. Delays in securing graphics and source materials risked slowing down manual finalisation and video production. ForestWorks worked with NHVR to resolve legal and IP access issues, incorporating the delay into the revised project schedule.

Stakeholder availability was a recurring risk, particularly given the reliance on volunteer participation from Subject Matter Experts and Steering Committee members. ForestWorks mitigated this by rescheduling meetings within a condensed timeframe and structuring consultation sessions to maximise input during limited availability windows.

The project's launch strategy was initially tied to key industry events, including AFPA and AFCA dinners. Due to project delays, these opportunities were missed. ForestWorks acknowledged this in formal reporting and worked with the Steering Committee to develop a revised launch strategy aligned with the adjusted release timeline.

Finally, technical inconsistencies between the original 2014 manual specifications and updated testing data required careful management. NHVR commissioned Smedley's Engineers to conduct friction testing and lashing comparisons, and ForestWorks used these findings to inform updates to the manual and video content. This ensured the final resources reflected current safety standards and engineering evidence.

Risk Summary Table

Risk	Impact	Mitigation Strategy
Project manager illness	Delays in milestone activities	Timeline replanning and variation approval
National Code delays	Hold-up in manual and video finalisation	Coordination with NHVR and adaptive use of draft content

IP access issues	Delay in graphics and manual completion	NHVR engagement and legal clarification
Volunteer availability	Delayed feedback and consultation	Rescheduling and targeted SME engagement
Launch plan disruption	Missed marketing opportunities	New launch strategy under development
Technical misalignment	Inaccurate safety guidance	NHVR-led testing and content revision

In summary, ForestWorks effectively identified and managed risks throughout the project, maintaining transparency and adaptability in the face of evolving circumstances. This approach ensured that the project remained on track and that the final resources were accurate, relevant, and aligned with industry needs.

Stakeholder Management

Stakeholder engagement was a central component of the Log Haulage Manual & Videos Project, with ForestWorks Ltd leading a collaborative and inclusive approach to ensure broad industry input and alignment with sector needs. The project brought together a diverse group of contributors, each playing a distinct role in shaping the development and delivery of the final resources.

As the project grantee and lead implementer, ForestWorks was responsible for managing overall execution, coordinating stakeholder activities, and delivering key outputs. This included the development of the updated Log Haulage Manual and the educational video series. ForestWorks staff oversaw reporting, consultation, and engagement processes, ensuring that all parties remained informed and involved throughout the project lifecycle.

The Project Steering Committee (PSC) provided strategic oversight and guidance. Comprising representatives from NHVR, the AFPA, and the AFCA, the PSC played a key role in reviewing progress, approving video content, and supporting stakeholder engagement. Their involvement helped navigate project delays and maintain alignment with broader industry priorities.

Subject Matter Experts (SMEs) were engaged through AFPA and AFCA networks to contribute technical knowledge and review content. These experts participated in consultation meetings and helped shape the manual and video materials, particularly around topics such as load restraint, workplace health and safety, and safe driving practices. Their input ensured the resources were grounded in operational realities and reflected current safety standards.

NHVR, as the funding body and strategic advisor, provided ongoing support throughout the project. This included updates on testing and specification reviews-such as engineering analysis conducted by Smedley's-and guidance on aligning manual content with the evolving National Log Haulage Code. NHVR also participated in PSC meetings and confirmed milestone completions.

External contributors played a vital role in content production and communications. The video production team, led by Mitchell Hodge Studio, worked closely with ForestWorks and SMEs to produce high-quality educational videos. The Skills Impact communications team supported stakeholder engagement, managed the project webpage, and assisted with marketing materials used to promote the resources and gather feedback.

In summary, the project benefited from strong stakeholder collaboration, coordinated by ForestWorks with professionalism and transparency. The inclusive approach ensured that the final resources were informed by a wide range of industry perspectives, contributing to their relevance, quality, and potential for widespread adoption.

Project Communications

Project communications were planned and executed to support stakeholder engagement, promote awareness of the initiative, and facilitate feedback during key stages of development. ForestWorks led the communication strategy, ensuring that messaging was clear, targeted, and aligned with project milestones.

A dedicated project webpage was launched on 10 March 2023 to act as a central information hub. This webpage offered updates on draft materials in development and provided stakeholders with opportunities to engage with the project. Direct outreach was also undertaken, including communications to 74 Registered Training Organisations and 11 Forestry Hubs, inviting participation, updates, and contributions. This broad outreach supported strong early awareness and engagement across the sector.

A Marketing and Communications Plan was endorsed early in the project and set out a program of media releases, newsletters, social media activity, and presentations at industry meetings. While some activities were rescheduled due to the later finalisation of project outputs, the plan ensured communications remained coordinated. The initial launch was intended to align with major industry events, but the revised manual timeline meant alignment with AFPA and AFCA events was not possible. Staffing changes within AFCA also affected the original launch arrangements.

To address this, a revised launch strategy was developed focusing on direct industry engagement through two webinars. The first was a Finalisation Webinar, designed to present the completed desktop published version of the Log Haulage Manual and highlight key updates. The second was a Launch Webinar, which formally released the final manual and video series to industry. Both webinars were delivered in January and were well attended, with 40 participants joining the Finalisation Webinar and 24 participants attending the Launch Webinar.-published version of the Log Haulage Manual and highlight key updates. The second was a Launch Webinar, which formally released the final manual and video series to industry. Both webinars were delivered in January and were well attended, with 40 participants joining the Finalisation Webinar and 24 participants attending the Launch Webinar.

This revised strategy was supported by a targeted communications campaign that included direct email notifications, updates through industry newsletters, and LinkedIn posts to encourage participation and industry-wide awareness. A recording of the Finalisation Webinar was uploaded to the ForestWorks website to ensure stakeholders who were unable to attend could review the content at their convenience.

Despite earlier timing challenges, ForestWorks maintained a consistent and coordinated communications approach, ensuring that the final resources were promoted effectively and that the sector had multiple opportunities to engage with and adopt the outputs of the project.

Issues

During the course of the Log Haulage Manual & Videos Project, ForestWorks encountered a number of challenges that affected timelines, stakeholder coordination, and delivery planning. Despite these issues, the organisation responded with adaptive planning, transparent communication, and formal variation processes to ensure continued alignment with project objectives.

Delays in the finalisation of the National Log Haulage Code also impacted the project. Testing of load restraint specifications by Smedley's Engineers, and the need to reconcile discrepancies between older specifications and the draft code, slowed progress on both the manual and video components. As these resources were designed to align with the Code, ForestWorks paused finalisation activities until confirmation of the content was received.

Intellectual property access presented another challenge. Legal and ownership clarifications delayed access to original graphics and specifications from the 2014 manual, which affected the visual and structural

development of the revised materials. ForestWorks worked with NHVR to resolve these issues and incorporated the delay into the updated project schedule.

The project's reliance on volunteer stakeholders, including PSC members and SMEs, introduced scheduling vulnerabilities. Availability was impacted by festive periods, and competing commitments, which delayed consultation and feedback processes. ForestWorks mitigated this by rescheduling meetings and structuring engagement sessions to maximise input within limited timeframes.

Marketing and launch planning was also affected. The original strategy aimed to align the release of project outputs with major industry events, such as the AFPA Gala Dinner and AFCA Annual Dinner. Due to delays in finalising the manual and videos, these opportunities were missed. A revised launch strategy was developed to include two Webinars.

In response to these cumulative delays, ForestWorks submitted a formal variation request to NHVR. The original project end date of 30 May 2024 was extended to 30 August 2024, with milestone dates adjusted accordingly. NHVR approved the variation, and updated timelines were reflected in subsequent reporting.

Despite multiple barriers-including delays in the National Code, and stakeholder coordination challenges-ForestWorks maintained progress through adaptive planning and transparent communication. Formal extensions and deed variations were requested and granted, allowing the project to remain aligned with its objectives and deliver high-quality safety resources for the log haulage sector.

Deliverables

The Log Haulage Manual & Videos Project successfully delivered two core resources aligned with its objective to improve heavy vehicle safety in the log transport sector. These deliverables were developed in consultation with industry experts and stakeholders, ensuring they are practical, relevant, and aligned with the evolving National Log Haulage Code of Practice.

The first major output was the Updated Log Haulage Manual (LHM), developed as an industry guide to support consistent and safe practices across the sector. The manual aligns with the newly developed National Log Haulage Code and incorporates best-practice procedures for log loading, securing, and transport. It also includes updated guidance informed by recent NHVR engineering analysis, along with references to fatigue management, site safety, and environmental conditions. The manual is designed to be a practical tool for operators, trainers, and managers seeking to improve safety outcomes and meet compliance requirements.

The second key deliverable was a series of three educational videos, produced as a training and education package to complement the manual. The videos cover critical safety topics including load restraint, load shift and loss of control, fatigue and WHS for log haulage drivers, manual handling safety, and driving safely on forestry roads. Each video blends live footage, narration, and instructional demonstrations to create engaging and accessible content. The target audience includes log truck drivers, fleet managers, trainers, and Registered Training Organisations (RTOs) delivering the unit of competency *FWPCOT3315 – Transport forestry logs using trucks*.

The original project scope included five short educational videos. However, following a recommendation from the PSC Subgroup, the scope was revised to produce three longer videos. This change was approved by the NHVR, as documented in the PSC minutes dated 15 March 2023 and confirmed at the 25 July 2023 meeting.

Together, these resources provide a comprehensive and nationally consistent safety toolkit for the log haulage sector. ForestWorks' delivery of these outputs reflects a strong commitment to improving safety standards and supporting industry-wide adoption of best practices.

Project Transition and implementation

While the Log Haulage Manual & Videos Project formally concludes following the launch of its final deliverables, the initiative was structured to deliver long-term value beyond the funded period. ForestWorks has ensured that the Log Haulage Manual and educational video series will remain publicly accessible, supporting continued industry adoption of the Log Haulage Code of Practice across Australia.

The core deliverables-the Log Haulage Manual and three educational videos-are intended as permanent, freely accessible tools to support ongoing adoption of the Log Haulage Code of Practice. These resources are not time-limited and can be continually used by Registered Training Organisations (RTOs), forestry contractors, transport operators, safety managers, auditors, and regulators.

Lessons Learned and Best Practices

The project delivered high-value, practical outcomes for the log haulage sector, supported by strong collaboration, stakeholder engagement, and adaptability. One of the key strengths was the structured governance model, which enabled consistent input from NHVR, AFPA, AFCA, and other stakeholders. The Project Steering Committee and Subject Matter Expert Working Group played an important role in shaping and reviewing content, contributing to the quality and relevance of the final resources.

The development of the Log Haulage Manual and educational videos was another highlight. These resources addressed real-world safety issues and were designed to be accessible, engaging, and aligned with national safety and training standards. ForestWorks demonstrated flexibility and resilience in managing disruptions, including delays in the finalisation of the National Log Haulage Code. Through replanning and formal variation processes, all deliverables were completed within the revised timeframe.

However, the project also faced challenges. Delays in the timeline-caused by code finalisation, and access to legacy content-impacted early-stage planning and consultation. These delays also affected the original launch strategy, which had aimed to coincide with major industry events, resulting in missed promotional opportunities.

Looking ahead, there are several areas for improvement. Building contingency plans earlier in the project would help manage unexpected disruptions, particularly around key personnel. Incorporating formal evaluation tools, such as user feedback surveys, could support continuous improvement and provide insights into the impact of the resources. Greater flexibility in launch planning-such as digital-first campaigns or staggered rollouts-would help mitigate the effects of timeline changes. Securing access to intellectual property and technical data earlier in the process would also reduce downstream delays.

Overall, the project demonstrated strong delivery and collaboration, with lessons that can inform future safety initiatives. ForestWorks' ability to adapt and maintain quality under pressure was a key factor in the project's success.

Post Project Recommendations

Although the Log Haulage Manual and educational videos align with the unit FWPCOT3315 – *Transport forestry logs using trucks*, there is an opportunity to strengthen their integration into the broader training and compliance systems used across the industry. Embedding these resources into accredited training programs, auditing tools, and induction processes would help ensure they are consistently used and understood by drivers, trainers, and safety officers. Collaboration with Registered Training Organisations

(RTOs), safety regulators, and major industry employers would support formal incorporation into existing curricula and standards.