

Managing Timber Transport

Good Practice Guide

Advice on resolving timber transport problems for local authority road managers, timber haulage managers, forest owners and agents.



TimberTransportForum

delivering solutions for a growing UK harvest



Transporting Timber

Timber production is an expanding rural industry that provides jobs, reduces imports and helps to reduce greenhouse gas emissions.

Each year in the UK around 350,000 lorry-loads of sustainably grown logs are transported from our forests for processing in sawmills, pulp and paper mills and in wood energy plants.

When the area of planted forest started to expand in the early 20th Century it was assumed that the public road network would evolve in line with timber production. However some forests are still served by relatively weak minor roads which may not be suited to large volumes of heavy traffic.

This good practice guide provides an overview of how timber transport can be managed to minimise the impact of timber traffic on the fabric of the roads and on the neighbouring communities.



The Economics

Timber production forms a key component of the rural economy and underpins sustainable land management. Our commercially harvested forests deliver a wide range of public benefits including recreational facilities and environmental services.

However, roundwood logs have a relatively low value at the forest gate and transport costs can significantly affect the ability to release the potential from this sustainable resource. Value is added along the processing chain sustaining jobs in harvesting, haulage, sawmilling, processing, distribution, marketing, construction and energy production, and contributing taxes to the nation at every stage.

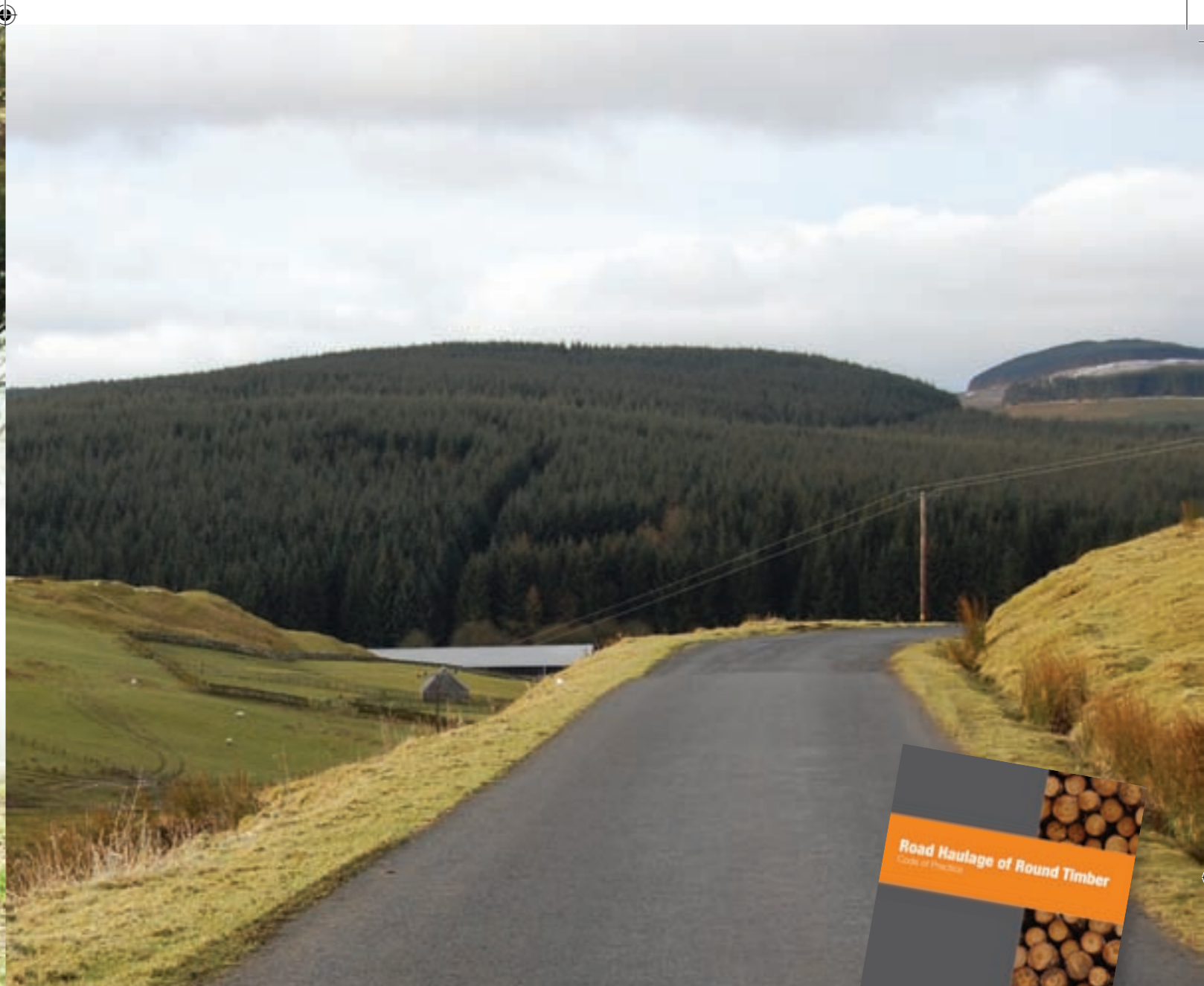
Many areas of forest planted in the 1970s and 1980s are now becoming ready to harvest so timber production from UK forests is increasing substantially. Meanwhile the local authorities responsible for the road network are facing major pressure on their budgets. With competing demands for funds it can be difficult for councils to prioritise expenditure on minor roads in remote rural areas.

The Timber Transport Forum

The Timber Transport Forum was set up in 2000 to address the issues arising from the use of rural transport infrastructure for timber transport and to ensure dialogue between local authorities and the timber sector.

The Forum has a 'Partnering Charter' and works through a network of Timber Transport Groups made up of forest owners and managers, local authority roads engineers, local councillors, timber processors and timber hauliers. The Forum and Groups provide a voluntary framework to manage timber movement on the public roads.





The Partnership Approach

A timber lorry has as much right to use the road network as any other large goods vehicle. The forestry sector regards timber transport as a long-established and legitimate rural activity with the road network playing a critical role in the supply chain.

A forestry plantation that can only be accessed by a fragile minor road may create a dilemma, not just for the forest owner and the local authority roads manager, but for all in the supply chain. The forest is the outcome of considerable long term investment by both the owner and the State and has the potential to deliver downstream benefits. On the other hand, the local road network is an asset required by the full range of rural people, businesses, service providers and tourists, and it needs to be maintained.

While councils can impose formal weight restrictions, this is a blunt instrument affecting all businesses, including public services. Where safety is at stake, restrictions may be essential, but the disadvantages, in terms of stifling rural commerce, must be recognised.

Local authorities may also consider whether a case can be made for recovering damages from forestry companies under Section 96 of the Roads (Scotland) Act 1984 and equivalent legislation in England and

Wales. To date, this approach has not been productive.

The Timber Transport Forum promotes a partnership approach to finding a negotiated solution that protects the road network while allowing efficient timber haulage and limiting the impact on local communities.

Good Practice

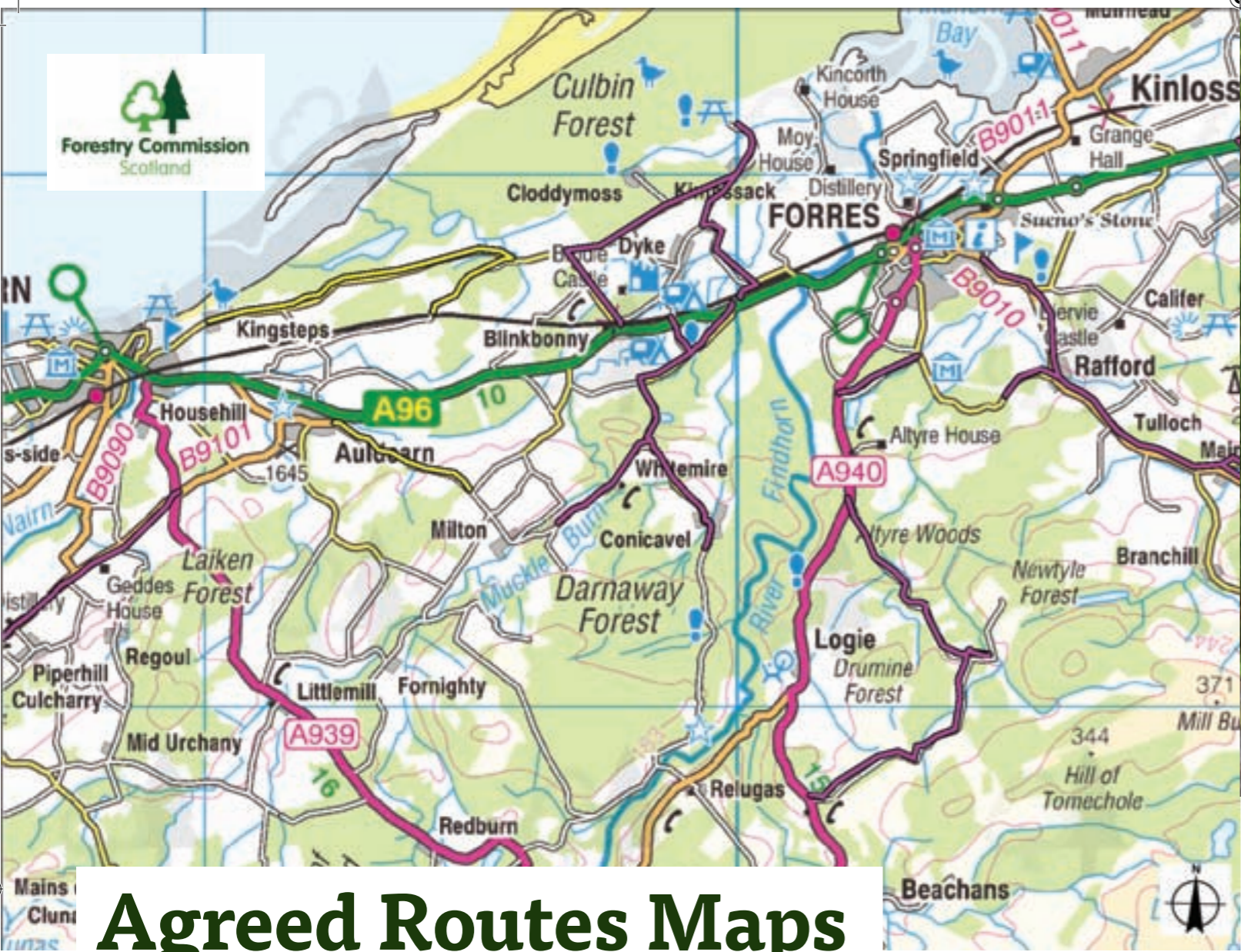
Good practice would see the forest owner and agent considering the status of the roads and the impact on communities well in advance of planned harvesting, checking the Agreed Routes Maps where these are available.

If transport constraints are identified, due to the location or the scale of harvesting, the forest owner or agent contacts the local authority to discuss the proposals. While there may be difficulties with access or finding appropriate routes, a solution is devised which may involve some road improvements and some voluntary conditions on haulage proposed by the local authority. Where several ownerships are involved, the local Timber Transport Group can help develop a suitable timber traffic management scheme.

The forest owner may experience an increase in costs resulting from a diverted haul route, restricted output or altering the internal forest road network. There may be in-kind contributions, perhaps supplying road metal from forest borrow pits or giving up land for road widening. This is balanced by protecting the road network and enabling sustainable extraction via the most appropriate route.





The conditions of the negotiated solution are included in the haulage contracts and all parties monitor the impact on the road as haulage proceeds.

A satisfactory compromise is far better - for the owner, the community and the nation - than having the forest resource landlocked.



Agreed Routes Maps

There are Agreed Routes Maps for most of Scotland and for parts of Northern England and Wales. Agreed Routes are voluntary, but have the support of the timber industry. The maps identify the following categories of roads:

- Agreed Routes**
 Can be used for timber haulage. All A roads are agreed routes unless otherwise shown.
- Consultation Routes**
 These require discussion between local authority roads departments and forestry businesses to agree a workable management regime to suit the road conditions. All B, C and Unclassified roads are Consultation Routes unless otherwise shown.
- Severely Restricted Routes**
 These occur in some regions. Businesses that are affected by these routes should liaise with the local authority and the Regional Timber Transport Groups.
- Excluded Routes**
 Consultation with the Local Authority is required to explore alternatives.

In some places **In-forest Timber Haul Roads** contribute to the Agreed Routes, but these may have seasonal restrictions.

Links to the Agreed Routes Maps are available through www.timbermap.org

There may be additional general restrictions on LGV traffic – such as height and weight restrictions or permit requirements - that are not detailed on Agreed Routes Maps.

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 Scale 1:109,339



Responsibilities

The partnership approach to timber transport issues relies on each partner accepting various responsibilities:

- Owners/buyers/agents**
 - Remember that having a felling licence does not mean there are no timber transport issues.
 - Determine the status of likely haul roads, consulting Agreed Routes Maps where these are in place.
 - If there are likely to be transport constraints contact the council well in advance of harvesting to agree road use.
 - Contracts with timber hauliers should:
 - specify the haulage routes to be used and any conditions that have been agreed with the local authority over road use.
 - include a penalty clause in relation to over-loading.
 - Where woodlands are managed to the UK Woodland Assurance Standard, owners/managers shall mitigate the health and safety and wider impacts of timber traffic on local people; for larger woods there should be documented evidence that the actual and potential impacts of operations on local people have been considered, particularly in and around the woodland, and steps taken to mitigate them.
- Local Authorities**
 - Engage with the timber industry through Timber Transport Groups where these exist.
 - Include roads departments in the consultation process for felling licenses and forest plans and use the process to highlight road constraints to forestry managers.
 - Contribute to the update of Agreed Routes Maps, reviewing existing traffic management agreements to take account of good practice options.
 - Nominate appropriate staff to liaise and communicate with the forest industry and agree reasonable response times when dealing with specific enquiries.
 - Provide timber hauliers with up to date information on road closures and road repairs that may restrict haulage.
 - Use the Agreed Routes Maps and data on the source of future timber production to help plan maintenance and prioritise investment in infrastructure.
- Hauliers**
 - Provide local authorities with an indication of longer term (5-10 year) haulage plans, working through timber transport groups, where these exist. This enables improved targeting of available resources.
 - Provide hauliers with a risk assessment for in-forest elements of the haulage operation.
 - Follow the Agreed Routes Map (where these are in place) and any conditions set within the haulage contract.
 - If a road is suffering damage, notify the local authority roads department.
 - Follow the recommendations of the Road Haulage of Round Timber Code of Practice.
 - Provide the works manager with a risk assessment for the haulage operation.



Traffic Management

The following points may be useful in developing appropriate timber traffic management agreements.

Reduce public road use

- Where possible, lay out the internal forest road network to keep timber traffic off fragile public roads and weak bridges, and away from community centres.
- Negotiate agreements with other forest and land owners to share internal roads where this makes sense.
- Consider opportunities for rail or boat transport where this would reduce the impact on roads or communities.

Minimise road damage

- Avoid overloading.
- Reduce speed to 25mph on minor roads.
- Consider the impact of seasonal conditions on the road network.
- Extend the harvesting period if possible to spread traffic movements and reduce the frequency of lorry movements. When loading timber boats, try to increase the stock piling area at the pier, to avoid concentrating timber traffic.

- Consider altering lorry configuration, deploying shorter trailers coupled with twin wheels or 'maxi' tyres – avoid standard 'super single' wheels. Six wheel rigid lorries with drawbar trailers can perform better on narrow twisting roads than articulated lorries.
- Consider using lorries fitted with tyre pressure control systems or bespoke low ground pressure vehicles.

In most cases these measures will result in increased costs to the haulier and consequently to forest owners and processors.

Road Management

The following measures may help to reduce the impact of timber traffic on minor roads.

Regular maintenance

- A wet road is a weak road so ensure road drains are well maintained.
- Cut back roadside vegetation and overhanging branches that obstruct sight lines, force vehicles into the middle of the road and delays drying of the road.
- Monitor road condition and deterioration using photography, or road condition surveys.
- Have protocols in place should problems arise.
- Patch problem areas when they develop rather than undertake major advance works.

Road improvements

- Improve signage; this can improve safety without major expenditure.
- Ensure passing places are adequate on single track roads.
- Identify weakest sections of the road and geometric pinch points (use tracking software or vehicle trials to determine suitability).
- Undertake local pavement strengthening (overlays with or without steel or fibreglass reinforcement).

Appropriate road design

- Many forest access roads are relatively lightly trafficked and do not sensibly justify the full standards of the national Design Manual for Road and Bridge Works. A good road suited to timber haulage can be built for less than the cost of a 'standard' public road. Where major road strengthening works are being considered, roads departments are encouraged to develop a "fit for purpose" design approach for roads and bridges.

The design and use of the structural pavement of unsealed roads is the subject of an Annex to the Timber Transport Forum toolkit.

Community Relations



Large numbers of timber lorries travelling through small towns and villages may attract community concern, particularly when new forest areas start to be harvested or where timber traffic on a route increases substantially.

Timber transport is a legitimate and long-established rural activity and timber lorries have as much right as any other vehicle to use the public roads. Hauliers are well aware of the limitations of the minor road network and the difficulties of negotiating narrow roads and busy streets.

Community representatives frequently raise issues such as the need for lorries to reduce their speed, (which is often perceived to be higher than it is), to avoid school travel periods and to prevent convoying of lorries.

Situations can arise even on agreed haulage routes; the road condition can quickly deteriorate and community issues can flare up from a minor incident.

Concerns can sometimes be alleviated by informing or involving communities at an early stage. Where a number of owners and hauliers are involved, this may be best

done through local authorities or Timber Transport Groups.

In some well-forested regions, community councillors and local transport police regularly attend Timber Transport Group meetings and play a constructive role in helping to explain issues and manage relations with communities.

Manage community concerns

- Use forest management plan scoping meetings to consider the impact of haulage on rural communities. Local authority road managers should be invited to attend, and to flag-up known problems.
- Try to avoid road use at locally critical times of the day, such as school start and finish times.
- Inform community councils of any changes in timber traffic which are likely

to impact substantially on communities or other road users.

Where Timber Transport Groups become involved they should:

- Engage with community representatives and local traffic police and inform them of timber transport issues.
- Establish working relations between all parties, share contact details and agree suitable means of prompt communication.
- Consider the scope for voluntary measures or traffic management solutions that help to address the concerns of the community.



Environmental Management

Timber production provides a reliable, low-risk and low-cost means of reducing our net emissions of carbon dioxide, one of the greenhouse gases that contribute to global warming.



Trees take carbon dioxide from the atmosphere and turn it into wood. This can then be manufactured into wood products and used to replace more energy-intensive construction materials. Small dimension logs and sawmill by-products find a market with board and paper mills, or can be used as biomass fuels, feeding renewable energy power stations and boilers.

Timber hauliers should implement fuel-efficient driving techniques to keep diesel consumption to a minimum. Fossil fuels are also used to maintain and repair roads, so Agreed Routes Maps and measures to limit road damage are also important. Tyre pressure control systems and other low ground pressure technologies may help to reduce road damage, while prolonging tyre and vehicle life.

Route planners should recognise that the fuel consumption of lorries on in-forest gravel roads on steeper gradients is about double that on tarmac roads.

In some situations, rail and boat transport can reduce emissions on longer hauls. However, the initial lorry journey from the forest is usually still required, and there may be concentrated wear and disturbance at piers and railheads.

Timber Haulier Training

Training material for timber hauliers, has been developed by The Timber Transport Forum. Approved driver CPC (Certificate of Professional Competence) training providers may be able to provide forestry-specific training in safe and fuel-efficient driving, loading and unloading timber and securing loads. Driver CPC courses in first aid and the use of spill kits to prevent pollution may also be relevant. Timber hauliers should follow the recommendations of the Road Haulage of Round Timber Code of Practice.

Sources of Information

Agreed Routes Maps for forested areas of Britain are available through:

www.timbermap.org

The management of Fragile Roads is dealt with by:

www.roadex.org

The Timber Transport Forum website provides:

- Contacts details for regional timber transport groups across Great Britain.
- A link to the Timber Transport Toolkit which is a comprehensive reference document on timber transport.
- Information on haulier training .
- A link to the Road Haulage of Round Timber Code of Practice.

www.timbertransportforum.org.uk

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