

Infrastructure and Capital Investment Committee

Freight Transport in Scotland

Call for views

A Response from the [Timber Transport Forum](#)ⁱ.

The members of the Timber Transport Forum welcome the opportunity to share our experience of the challenges facing freight transport in Scotland. Timber Transport Forum members have considerable experience of the challenges of moving freight, by road, sea and rail throughout Scotland.

The Timber Transport Forum

The Timber Transport Forum is a voluntary partnership that supports forestry by ensuring that the timber industry can access our forests and take timber to market in a sustainable way. At the same time we seek to minimise the impact of timber transport on the public road network, on local communities and on the environment.

The Forum is made up of representatives from eleven regional timber transport groups from across Scotland, North England and Wales, as well as the Convention of Scottish Local Authorities, the forest industry associations (Confederation of Forest Industries, UK Forest Products Association and Forestry Contracting Association), Scottish Forest & Timber Technologies, Forestry Commission England, Forestry Commission Scotland and Natural Resources Wales, Wales Forest Business Partnership, Rail Freight Group, the Road Haulage Association and the Society for Chief Officers of Transportation in Scotland.

In Scotland the Forum works through regional timber transport groups which are themselves partnerships of industry, local authorities and public agencies.

Forestry in Scotland

Commercial forestry now covers almost 14% of Scotland's land area ([see map](#))ⁱⁱ. The bulk of timber production comes from heavily forested regions such as The Highlands, Argyll, Dumfries and Galloway, Grampian, Ayrshire, South Lanarkshire, Scottish Borders, Perth and Kinross, Stirlingshire, Loch Lomond & the Trossachs, Moray and Angus. In some regions, commercial forestry cover can approach 30%.

The Scottish Government has a target to continue to expand the forest resource by 100,000 hectares in the decade to 2022.

Scotland's forests produce around 7 million tonnes of roundwood each year. This will rise to around 10m tonnes per year by 2030. The timber needs transported from the forest to sawmills and other processors and on to markets throughout the UK. The management of productive forests and the wood processing industries creates 38,500 jobs and add £1.67 billion per year to the Scottish economyⁱⁱⁱ.

Most of the existing plantation forestry resource is in the uplands and served by weak, sometimes single track, public roads, ill-suited to timber haulage vehicles. Harbour and rail access infrastructure in rural areas is also dated, which restricts opportunities for intermodal transport of timber. As a result the home-grown timber supply chain is less efficient than it could be and impacts on the minor road network, and on the communities that rely on them.

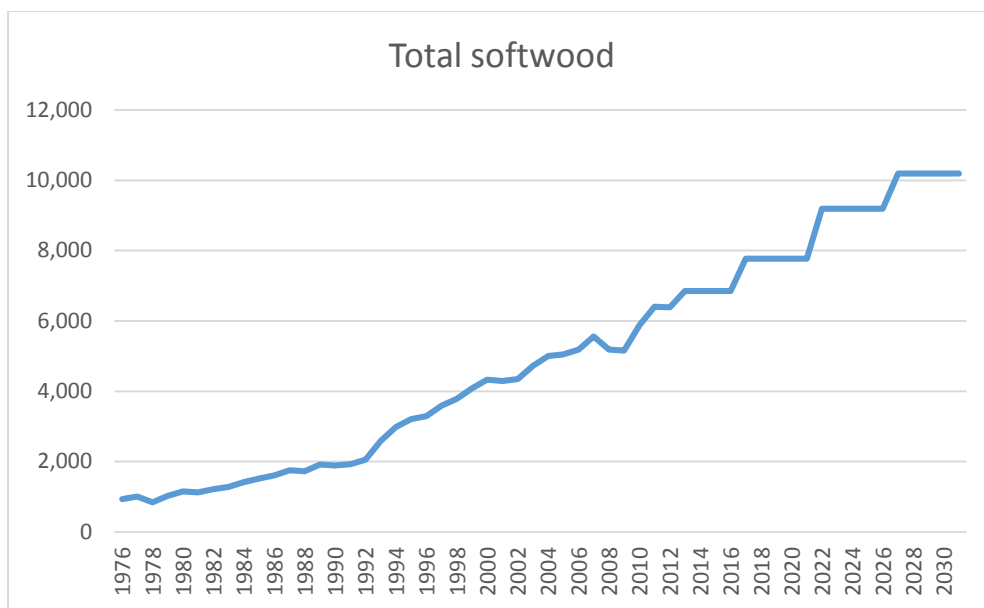
Our forest resource is here to stay; when forests are harvested there is a general requirement to replant. So, where there are substantial concentrations of productive forests, there is a strong rationale to construct robust, fit for purpose infrastructure that can serve our forests in the long term.

Scotland's growing woodlands sequester greenhouse gases – currently over 8.0 MtCO₂e/year, projected to reduce to around 7.0 MtCO₂e by 2022^{iv}. In 2011^v recent new planting sequestered 0.45 MtCO₂e. The scale of investment required to maintain and upgrade timber transport infrastructure is significant from a local authority perspective but minimal when compared with the investment requirements of alternative carbon emissions reduction strategies.

Road Haulage

Forestry is located in the parts of the country with the longest lengths of minor roads and relatively low-volumes of traffic. Such roads tend to be low on the list of council priorities for maintenance and strengthening. The last significant improvement of much of the minor road network was in the early twentieth century when the councils 'adopted' the local roads and gave them a coat of tarmac. Many were not deliberately engineered and have limited capacity for heavy vehicles. The minor road network has largely served the minimal demands of a declining rural population, but the condition of these roads is now deteriorating and there is a serious backlog in maintenance^{vi}.

Timber output in Great Britain has increased five-fold since the 1970s with many new areas of forest coming on stream. Modern harvesting machines can produce more than eight lorry loads of logs each day. The lorries are bigger too, increasing from 32 tonnes to 44 tonnes gross weight (though axle weights have not changed substantially).



Scottish Softwood Production 1976 - 2012 and forecast production to 2031
(thousand green tonnes)

Where a minor road crosses a stretch of soft ground the road will flex with the weight of the lorry. The road should recover from occasional heavy traffic but repeated loading can damage the surface and the underlying layers.

On single track roads the lorry may be as wide as the carriageway placing the wheels at the weaker edges of the road. Long trailers can over-run tight corners causing damage to road edges and rear axles may scrub the road surface on tight bends. Passing places are limited and often too small to allow vehicles to pass without damaging verges and roadside drains. Poor roadside drainage further weakens the road structure.

Agreed Routes Maps

The Timber Transport Forum has identified the strategic parts of the public road network necessary to access the timber. To address the limitations and constraints of the road network the Forum maintains an [Agreed Routes Map](#)^{vii} which directs timber haulage traffic to the more suitable roads. In many cases there is no option but to use fragile or less suitable roads. In such cases we support a process of liaison between the industry and the local authority roads department to develop voluntary management protocols to minimise road damage and limit disturbance to other road users.

Some of this involves limitations to the frequency and timing of haulage or seasonal restrictions. The Forum has also worked with the timber haulage sector to promote [lower impact vehicle technologies](#) such as wider tyres and tyre pressure control systems to limit the impact on fragile roads^{viii}.

However these are stopgap solutions to inadequate infrastructure and the tonnage being transported continues to increase. The longer term answer is to upgrade our local roads to make them fit for 21st Century land use and business.

The Scottish Government currently provides £3m/year through the Strategic Timber Transport Fund^{ix} to match investment by local authorities and private sector growers to reduce the impacts of timber haulage by upgrading or bypassing substandard road infrastructure. This fund is well used^x but it can be difficult to deliver civil engineering works within the time constraints of available budget rounds. Local authorities are also limited in their ability to prioritise match funding in what are often (aside from timber haulage) relatively low traffic-volume roads. What we need is a long term commitment to local road improvement.

The local authorities in most well-forested areas prepare forestry strategies that consider the opportunities and constraints to productive forestry. In many cases poor transport infrastructure is seen as a constraint to efficient management of existing areas of productive forestry and a barrier to expanding the resource by new planting to meet government targets. In some situations poor public road infrastructure is the sole constraint to potential areas of new planting. Poor road infrastructure and the timber lorry traffic issues that result also contribute to negative community perceptions of the forest industry. This in turn leads to difficult community relations when consulting on woodland management operations or proposals for woodland expansion.

Some council areas such as Argyll and Bute and Scottish Borders incur the impacts of timber haulage on their roads while the benefits of the value-adding timber processing industries are located in other council areas.

Coastal Shipping

There is a concentration of commercial forest along the west coast of Scotland, particularly in Argyll and the west Highlands, and on Mull, Skye and Arran. The local road network is relatively poor in these areas and the geography makes for long distance road haulage to centrally located timber processors and markets.

The timber industry has been pro-active in developing coastal shipping from rural harbours and from temporary floating piers around the coast.

There are a number of companies transporting home-grown logs by sea to processors in Scotland, Ireland and mainland Europe.

The Scottish Government's Strategic Timber Transport Fund supports Timberlink^{xi}, a coastal shipping service from the forests of Argyll across the Firth of Clyde. This funding is provided under a Public Service Contract specific to the maritime estuary of the Firth of Clyde where sea transport provides a very significant reduction in the distance timber is moved en route to its final markets in Ayrshire. Associated British Ports has the public service contract to deliver Timberlink and they ship about 80,000 – 100,000 tonnes per year from Argyll ports (Sandbank, Campbeltown, Ardrishaig and (until recently) Portavadie) to processors in Ayrshire via Troon Harbour.

JST Services based in Ayr and The Great Glen Shipping Company and Boyds Brothers both based at Corpach near Fort William shift timber around the west coast of Scotland from ports and floating piers.

Ferguson Transport & Shipping based at Corpach has boats for coastal shipping and a mobile timber loader to load boats. Timber from Applecross is being shipped from Ferguson's yard at Kishorn.

JST Services and Boyd Brothers both provide floating piers and handling services which have been used to take timber from Raasay, Glenelg, Mull (Pennyghael), Kingairloch, Glen Etive, Jura, etc.

TSL Contractors Ltd and Forestry Commission Scotland have built a new pier^{xii} at Fishnish on Mull to take timber off the island

Timber goes out of the Argyll ports and from Kyle of Lochlash, Montrose Harbour and from Scrabster on the north coast to processors in Ireland, mainland Europe and Scandinavia.

Roundwood is delivered by sea to Iggesund's paper mill and biomass plant in Workington from Argyll ports, Lochaline pier in Morvern and elsewhere.

Troon Tugs uses barges to take timber from Arran to Ayrshire and has a 750t landing craft taking timber from coastal forests on the west coast of Scotland to Troon in Ayrshire.

The growth in coastal shipping of timber has come about despite major infrastructure limitations. Most of the older harbours such as that at Ardrishaig have limited storage and handling areas for timber, requiring concentrated road haulage to load boats. This concentration of lorry traffic puts additional stress on the surrounding road network and creates disturbance for local residents. While most harbour towns welcome timber shipping, the infrastructure limitations can cause issues – conflict with recreational marinas, local traffic and restrictions due to passenger ferries.

There is a case for more new bespoke freight piers with good access, storage and handling areas, such as that built recently at Fishnish on Mull.

The use of floating piers and landing craft is helpful in directly accessing more remote coastal and island forests. However the costs of multiple permissions and consents, together with the shore-based infrastructure and the limited economies of scale compared with a permanent pier, are not inconsiderable.

Rail

Currently there is no round timber moved by rail in Scotland.

The Timber Transport Forum responded to a consultation by the Rail Policy Team in 2009 detailing the many obstacles to rail freight in Scotland. Our response can be found here^{xiii}. We are not aware of any practical responses to the issues raised at that time.

Timber used to be taken by rail from across Britain primarily to Shotton pulp mill in North Wales. This mill converted to recycled fibre and no longer takes roundwood timber.

The main rail freight of roundwood timber is to Kronospan's panelboard mill in North Wales which has a rail connection direct into their yard. Kronospan take timber from a railhead at Cargo near Carlisle (drawing in Scottish timber), from Ribbleshead siding in North Yorkshire and more recently from sidings in Devon and South Wales. This rail haul works because the processor is rail connected and they draw in large volumes (daily trains) to one buyer^{xiv}.

BSW Timber sometimes use the return leg of the Kronospan train to take sawlogs to their sawmill, adjacent to the sidings at Cargo near Carlisle.

Until 2009 Kronospan took timber from the railway stations at Arrochar and Crianlarich near Loch Lomond in Scotland. Both used existing sidings adjacent to passenger platforms with limited storage and handling areas. In 2010 Tactran (the Tayside and Central Scotland transport partnership) undertook a study of market demand to re-instate this service and improve the loading infrastructure but so far this has not been taken forward.

In 2001 a raiiside loading bank was constructed beside the line at Kinbrace in the Flow Country of Caithness to enable harvesting from forests in Strathnaver. Over the next three years 50,000t were taken by rail from Kinbrace to Inverness by English, Welsh, Scottish Railways (EWS) for onward haulage by road to Norbord at Dalcross. This stopped in 2005 on economic grounds. The Highland Timber Transport group has made repeated efforts^{xv} to resurrect rail haulage from the Flow Country where the volumes being harvested continue to increase and are well beyond the capacity of the fragile road network. There has been project development work in 2009, 2012, 2013 and most recently the HITRANS-led Branchliner project proposal in 2014. However the constraints of the rail infrastructure on the far north line coupled with the **very high costs** of engaging with the rail sector suggest that it would take substantial up-front investment and continuing subsidy to reinstate rail haulage from the Flow Country. **The forestry sector requires a subsidy mechanism for using the railway in this particular scenario that can take account of the substantial savings to road maintenance.**

There are also plans to construct a rail siding at Rannoch in Perthshire where the west highland line passes through a large concentration of forest with poor road connections. The idea is to haul timber north from the forests to the BSW Kilmallie sawmill at Corpach which still has an old rail siding left over from its days as a pulpmill.

There are several challenges with using rail for timber haulage. One is the lack of rail connected processing sites. We have the classic chicken and egg problem; until there is timber on rail, processors will not build or re-instate sidings and until there are rail connected processors the economics of rail haulage are not viable. Another constraint is the very real difficulties of working on the periphery of the network with a fragmented service. Putting a rail haulage project together requires having to deal

with line issues through Network Rail, dealing with track availability and maintenance contracts, locomotive providers, rail freight companies with suitable wagons and third party logistics. Often the forestry supply side is also fragmented with multiple owners and agents with their own felling plans.

As with the roads and coastal shipping, our ability to stitch together a solution to address the many constraints of working with aged infrastructure is limited and makes the cost of developing more sustainable haulage prohibitively expensive.

Freight Grants

We have mentioned the Strategic Timber Transport Fund (Scottish Government funding administered by Forestry Commission Scotland) This supports the Timberlink shipping service between Argyll and Ayrshire and proposals designed to minimise the impact of timber transportation on Scotland's fragile rural and public roads such as the upgrading of public and private roads serving concentrations of forests.

The issue of state aid can crop up as an issue in preventing direct subsidy of a particular freight route. In rural Scotland, with relatively few, large land holdings, intervention with grant funding does need to consider the range of likely beneficiaries of infrastructure improvements to avoid preferential treatment of individual businesses.

The Forum is keen for STTS funding to continue though we would welcome a longer term commitment to give more time for the development and delivery of match-funded projects. For public roads, the scheme does rely on concomitant prioritised expenditure by local authorities. There is a demand for far more investment in the local public road network in rural areas.

Scottish Government Mode Shift Grants are available to support investment in infrastructure to shift freight from road to rail or water.

Freight Facilities Grants (FFG) which support investment in infrastructure have funded all the floating piers which are moving timber in Scotland as well as piers at Corpach and Lochaline which handle the movement of timber by sea. However while there have been a number of other FFG applications for rail and shipping infrastructure these have not resulted in delivered projects. Given the commercial nature of this funding we don't always have full details of why projects have stalled.

The Waterborne Freight Grant (WFG) scheme provides limited term (3 year) revenue support to cover any additional cost of making the change from road to sea. A recent award of WFG totalling £960k was made by Boyd Brothers to transport sawn timber from Corpach to Tilbury by sea.

The Mode Shift Revenue Support Scheme provides non-time limited revenue support to projects transferring freight from road to rail or inland waterways. This provided support to the Kinbrace line-side loading of timber to rail project and the movement of timber from Glen Etive to Inverness via the Caledonian Canal.

These grants are not always accessible for forestry projects. In some cases, such as for landing craft access and floating piers, there may be no alternative road access from which to switch, so projects cannot be funded.

In addition the transport distances on rail or sea journeys may be relatively small. For example, in the Flow Country it is only 85 miles from Kinbrace to Inverness so while there is a strong rationale to take timber traffic off the fragile roads the value of any intervention based on distance is minimal.

Forestry requires more investment in roads strategic to timber transport and inter-modal facilities for rail and sea transport where these offer a more sustainable solution. We have a Land Use Strategy for Scotland setting out opportunities for sustainable management and production from our land, including an expansion of commercial forestry^{xvi}. The strategy needs to identify the associated transport infrastructure requirements of these land uses and drive a long term programme of infrastructure development.

Summary Responses to Questions

Can you identify the main infrastructure and policy obstacles to the free flow of freight in Scotland, whether carried by rail, road, air or sea?

Fragile narrow, ageing, outdated and poor condition rural roads and 19th century ports and harbours unsuited to 21st Century land use

How can Scotland's rail, road, air and sea freight routes to the rest of the UK, to Europe and worldwide be improved?

By far the most road freight traffic (89%) is domestic not international^{xvii}. The Timber Transport Forum would argue the economic benefit of investment in domestic infrastructure and rural infrastructure particularly if we are to spread economic activity throughout Scotland.

How can the Scottish Government structure its freight grant schemes to support the switch of freight to more sustainable modes of transport?

Given the limited uptake of Freight Facilities Grants in the recent round, clearly it takes more than money. We need basic rail infrastructure improvements; passing loops, sidings etc. The privatisation and fragmentation of the rail sector makes stitching workable projects together very difficult for small scale and lower value freight on the periphery of the network. Perhaps we also need regulatory mechanisms and a facilitator organisation that can create a supportive, can-do approach and help set up freight flows where there is a public benefit. The criteria for grant support should take account of the limited capacity of existing alternative public infrastructure in rural Scotland and allow for additional publicly- funded investment.

For coastal shipping from rural ports – we clearly need infrastructure upgrades, modern bespoke ports and again, facilitators to draw together fragmented customer bases and to assist dealing with the multiple permissions and consent bodies.

One of the most useful recent European collaborations in terms of rural infrastructure is the [Roadex](#)^{xviii} Network. This was a Northern Periphery Programme Project that undertook research and developed good practice for sustaining low-volume fragile roads used for freight. The Roadex project resulted in a Knowledge Centre of information and reports and an e-learning system. The Roadex network continues with four partners in Scotland; Transport Scotland, The Highland Council, Comhairle nan Eilean Siar, and the Forestry Commission. It would be useful to secure funding for specific projects that arise from the work of the network.

The Forum did raise the issue of sources of European Funding for rural transport infrastructure with the Environment and Climate Change Minister last year and FCS and the Timber Transport Forum did investigate possible Interreg projects - but none have appropriate criteria.

How can the freight industry make a contribution to greenhouse gas emissions reduction?

Infrastructure is the backbone of efficient logistics. The forestry sector is Scotland's only carbon sink and the only growth industry where more activity leads to more carbon sequestration. The Timber Transport Forum undertook a comprehensive [carbon footprint](#)^{xix} of timber transport within the context of the timber supply chain. Timber transport emissions are relatively small, accounting for 6% of the emissions arising from producing one tonne of sawn timber and 15% for producing one tonne of biomass fuel.

We have a Land Use Strategy aimed at climate change mitigation and adaptation that supports forest expansion, along with other sustainable food and drink, land-based activities. However the Land Use Strategy has not taken account of the infrastructure implications of the strategy although they are fundamental to efficient land use. Our existing road network is a product of 18th and 19th century rural land uses. We need one suited to 21st Century and (looking ahead) 22nd Century land uses.

Which policy changes, or infrastructure improvements, are required to increase the flow of goods through Scotland's major sea ports?

The Forum is more concerned with the many minor sea ports which, if upgraded, offer rural Scotland with an efficient opportunity for the domestic (or near international – Irish Sea, North Sea) freight haulage sector.

Further Information

The Forum has well over 100 people involved in timber transport groups across Scotland who are dealing with freight movements every day, working around the severe limitations of our transport infrastructure and trying to run efficient businesses. We would be willing to provide further information and contribute to any serious commitment to deal with freight transport obstacles. The Forum has responded to several such consultations in recent years with little obvious progress. We welcome the Scottish Government's continuing commitment to the Strategic Timber Transport Fund but are concerned at the continuing lack of recognition of the

importance of local freight transport infrastructure or the development of a coherent long term strategy for its modernisation - which is vital if all of Scotland is to prosper.

ⁱ <http://www.timbertransportforum.org.uk>

ⁱⁱ [http://www.forestry.gov.uk/pdf/SCOTLAND_MAP.pdf/\\$FILE/SCOTLAND_MAP.pdf](http://www.forestry.gov.uk/pdf/SCOTLAND_MAP.pdf/$FILE/SCOTLAND_MAP.pdf)

ⁱⁱⁱ Roots for Future Growth

<http://www.forestryscotland.com/media/101263/rffg%20lower%20res%20web%20version%202.pdf>

^{iv} [Low Carbon Scotland: Meeting the Emissions Reduction Targets 2010-2022 Technical Appendix](#)

^v [The Scottish Forestry Strategy: Implementation Plan \(2012-15\) And Progress Report \(2011-12\)](#)

^{vi} [http://scots.sharepoint.apptix.net/Lists/Announcements/Attachments/141/170510%20SCOTS%20SRMCS%20Backlog%20\(Public%20Report\)%20V2-2.pdf](http://scots.sharepoint.apptix.net/Lists/Announcements/Attachments/141/170510%20SCOTS%20SRMCS%20Backlog%20(Public%20Report)%20V2-2.pdf)

^{vii} <http://timbertransportforum.gaist.co.uk/#/PublicMainPage>

^{viii} Tread Softly 2014

http://www.timbertransportforum.org.uk/Upload/Documents/22_TimberTransportForumTreadSoftlyReportLowRes.pdf

^{ix} <http://www.forestry.gov.uk/STTF>

^x <http://scotland.forestry.gov.uk/images/corporate/pdf/improving-timber-transport.pdf>

^{xi} <http://scotland.forestry.gov.uk/images/corporate/pdf/timber-transport-case-study-timberlink.pdf>

^{xii} <http://scotland.forestry.gov.uk/supporting/forest-industries/timber-transport/mull-pier-development>

^{xiii} http://www.timbertransportforum.org.uk/Upload/Documents/22_RailFreightPolicyTTFResponse.pdf

^{xiv} http://www.timbertransportforum.org.uk/Upload/Documents/41_LogsonRailsKronospannote.pdf

^{xv} http://www.timbertransportforum.org.uk/Upload/Documents/22_TimberbyRailBriefingPaper.pdf

^{xvi} <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/woodland-expansion/weag-advisory-group>

^{xvii} In 2010, an estimated 116.8 million tonnes of goods were lifted within Scotland by UK HGVs and transported to destinations within Scotland. About 14.8 million tonnes of goods from Scotland were delivered to destinations elsewhere in the UK in 2010.

http://www.transportscotland.gov.uk/system/files/uploaded_content/documents/tsc_basic_pages/Road/scot-tish-freight-data-report-2013.pdf

^{xviii} Roadex <http://www.roadex.org/>

^{xix} The Carbon Footprint of Timber Transport

http://www.timbertransportforum.org.uk/Upload/Documents/22_TimberTransportFootprintnotefinalrev3.pdf

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