

Highland Timber Transport Group

Flow Country Strategy 2014-16



Picture 1 : Rimsdale Forest, Ben Hope and Ben Loyal in background

Group Chair: Robin Pope

August 2014

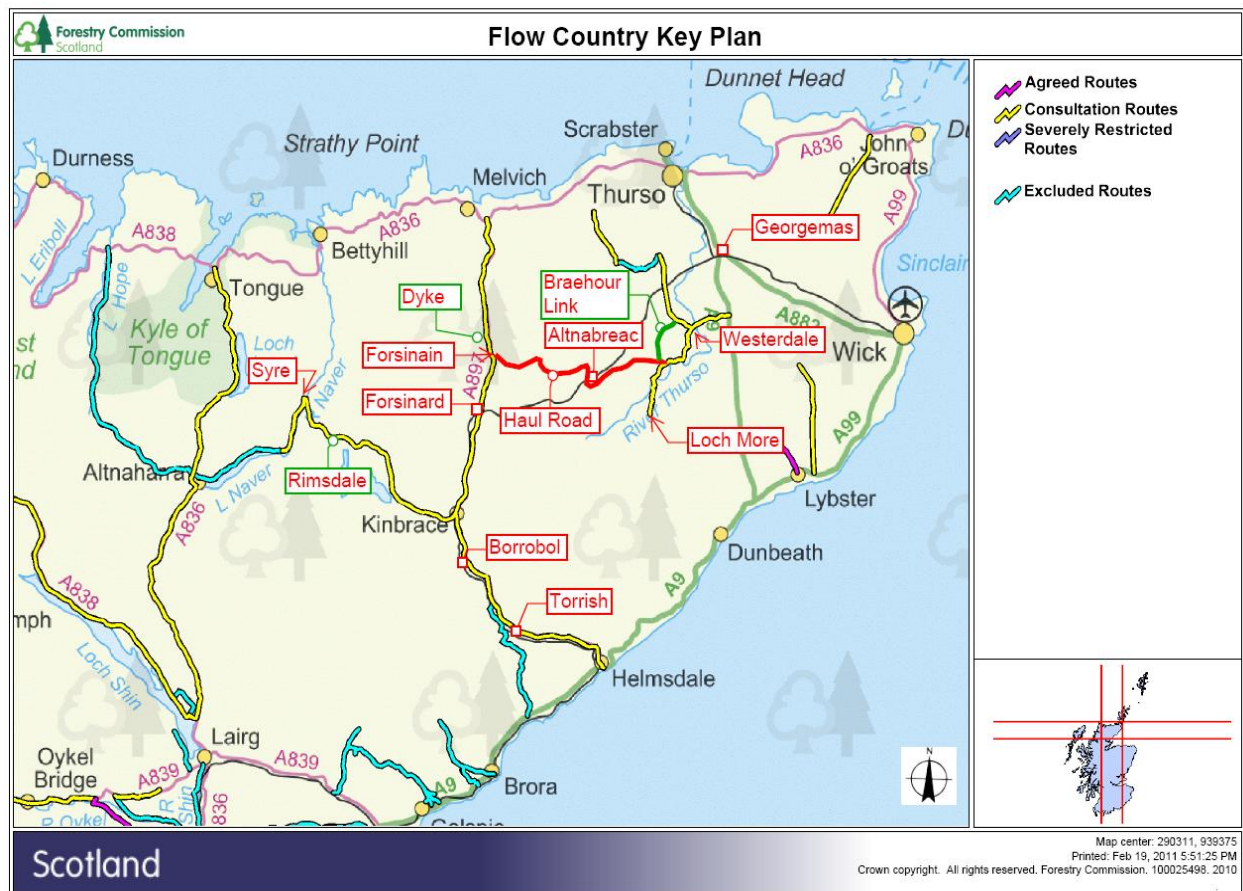


Figure 1 Flow Country Key Plan

Disclaimer

This document has been prepared as an aid to strategic Timber Transport Planning and informed debate. Neither the Highland Timber Transport Group nor their consultants can accept any liability for the subsequent use of the information contained in it.

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Introduction

In 2007 the Highland Timber Transport Group (HTTG) produced a discussion document setting out the background to the extensive afforestation carried out in the Flow Country from the 1960's onwards. That document identified for the first time the full extent of the challenge faced in getting the large volumes of maturing timber to distant markets over the fragile and inadequate public road network serving the area.

The conclusions of the 2007 document have been discussed between public bodies and the industry, and have underpinned the existing HTTG strategy for the area. This can be summarised as:

No	Strategy Element
1	Construction of a dedicated timber Haul Route from Forsinain on the A897 to Westerdale in Caithness, enabling timber from the catchment to flow east to the A9 Trunk Road or to local sea ports.
2	A range of improvements to the A897 and B871 roads to make them more capable of carrying current and residual timber traffic.
3	An ongoing effort to provide a viable and economic rail haulage service from the area to the Inner Moray Firth

Table 1: HTTG 2007 Strategy Elements

The following paragraphs outline the work that has been done to deliver the 2007 strategy.

Progress on the 2007 Strategy

Strategy Element 1: Dedicated Haul Route.

For project delivery purposes the cross country haul road was split into two sections:

- The 7.4km Braehour Link
- The 26.5km Flow Country Haul Road.

The Braehour Link was opened in the autumn of 2013 and is currently carrying large volumes of timber, mainly for export from Scrabster Port. It was completed on time and within budget by an STTS assisted partnership between Forest Enterprise and Summerlease.

The project for the remainder of the Flow Country Haul Route (FCHR) was led by Summerlease and involved negotiations with over a dozen legal owners and 10 partners. The project was awarded STTS funding and significant progress was made on the design and agreement. Unfortunately the lead partner has now withdrawn and the project is unlikely to proceed further.

Whilst the failure to proceed with the Haul Route is disappointing, the completion of the Braehour Link at least ensures that the large volumes of timber to the south and east of the railway at Altnabreac can access the public road network at Westerdale. Indeed, if constructive agreements

can be put in place over access rights, some of the forests adjacent to the railway north of Altnabreac may also choose to go this way to market.



Picture 2: Flow Country peatland restoration proceeding using Braehour Link

Strategy Element 2: Public road improvements.

A number of projects have already been carried out to upgrade the A897 and B871 and these have successfully been delivered with STTS funding support. However it has to be realised that the underlying condition of these roads is such that, whilst they can cope with day to day local traffic, they are still unsuited to sustained timber traffic. The key advantage of the Haul Route was that it would have removed all timber traffic from the north end of the A897, and the majority of that south of Kinbrace, enabling limited Council maintenance funding to be concentrated on a shorter length of network. This element of the strategy has now to be reviewed.

Strategy Element 3: The Rail Option

The difficulties of initiating a viable and economic rail service are well understood by all who have tried. The concept of railside loading was successfully demonstrated at Kinbrace in 2002, with a total of some 50kt consigned to Inverness, but this had to be abandoned by 2005 on cost and logistical grounds.

With the Far North Line running parallel to the A897 for some 45km, before heading east to Altnabreac, the use of the rail line still makes obvious strategic sense, provided the obstacles could be overcome. In 2011 the Roundwood by Rail project, led by major haulier John G Russell was awarded STTS assistance for innovative conversion of ISO standard flatracks to carry timber, aimed at cutting the cost of rail/road transfer. Unfortunately this project had to be truncated because of the difficulties of creating the logistical chain from forest to mill, although the flatracks are still available for future use.



Picture 3: John G Russell truck with trial ISO flatrack

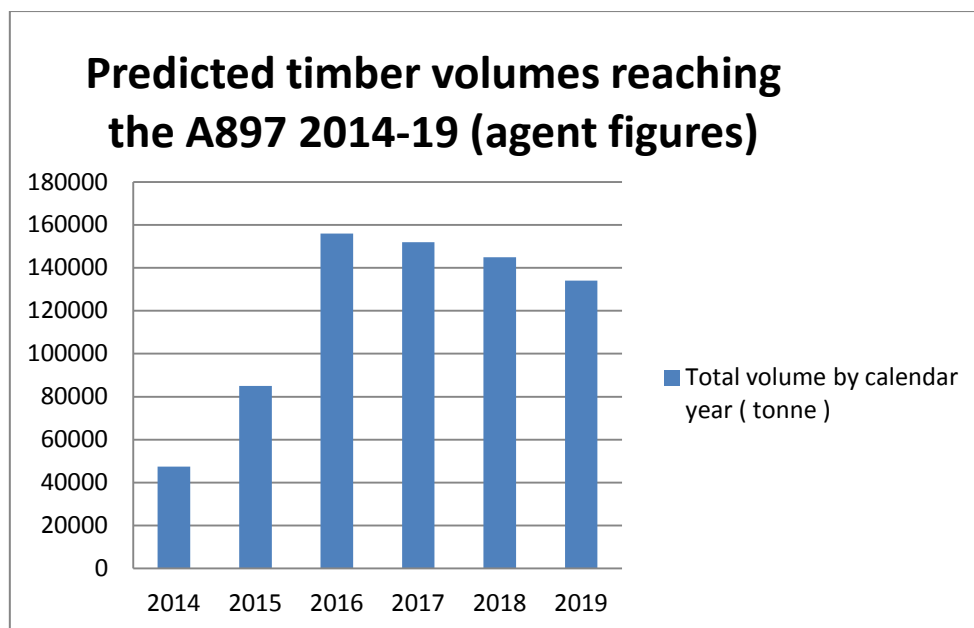
This was followed in 2012 by the Strathrail project, led by Scottish Woodlands supported by other key industry partners. This project envisaged use of the flatracks on a single 500t train from Kinbrace each Saturday night, when rolling stock was most readily available. This project was also awarded STTS funding but had to be abandoned at the last hurdle owing to difficulties with accessing the track on a Saturday night and finding a willing rail operator.

Review of the 2007 Strategy

In the light of the developments outlined above, it has become clear that a review of the 2007 strategy is urgently needed and that this should be based on the most reliable information currently available.

Although the HTTG had commissioned a strategic report on expected timber volumes from the area in 2012, and updated it in 2013, there was still a gap in the understanding on exactly when the production ramp would occur. In March 2014 the Conservator for the Highlands and Islands invited all owner/agents from forests in the A897 catchment to a meeting in Dingwall. There was a high level of cooperation and all parties agreed to participate in providing more detailed felling programmes than had previously been available. Whilst such information has to be viewed in the light of caveats about prevailing market conditions, disease, windblow etc, it is the most robust that is available.

The following graph shows how timber output from the area is expected to behave in the next 6 years, based on the figures received.



The decline in output shown in this graph after 2016 is believed to be misleading as the data is focused on the short term future. Merging it with data for other forests collected by CJ Piper & Co in 2012/13 is believed to give a better impression of the longer term output up to 2026.

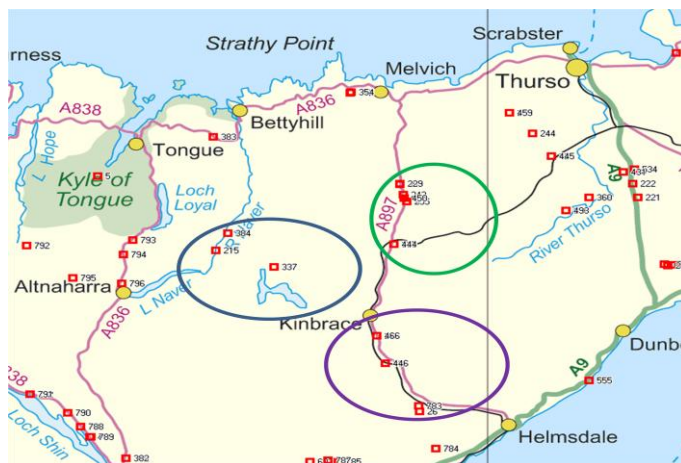
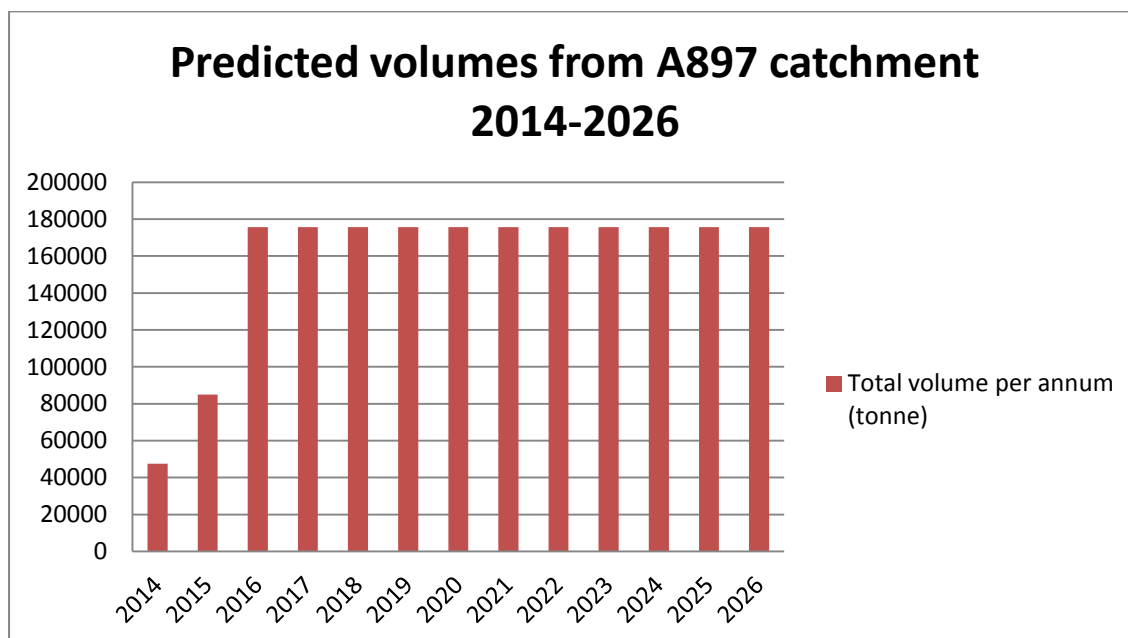


Figure 2: Map of sub-catchments served by A897

Sub catchment	Data Source	Timescale	Tonneage
South of Kinbrace	Agents returns 2014	By 2020	255,000
Naver, West of Kinbrace	CJ Piper Report 2013	By 2026	657,000
West of Altnabreac	CJ Piper Report 2013	By 2026	1,152,000
		Total	2,064,000

The following graph reflects the agent's returns for the years 2014 and 2015, with the whole of the remaining volume averaged over the period 2016-26. It is unreasonable to expect the extraction profile to be exactly as shown, but it does clearly demonstrate the very large annual volumes that can be expected to come out.

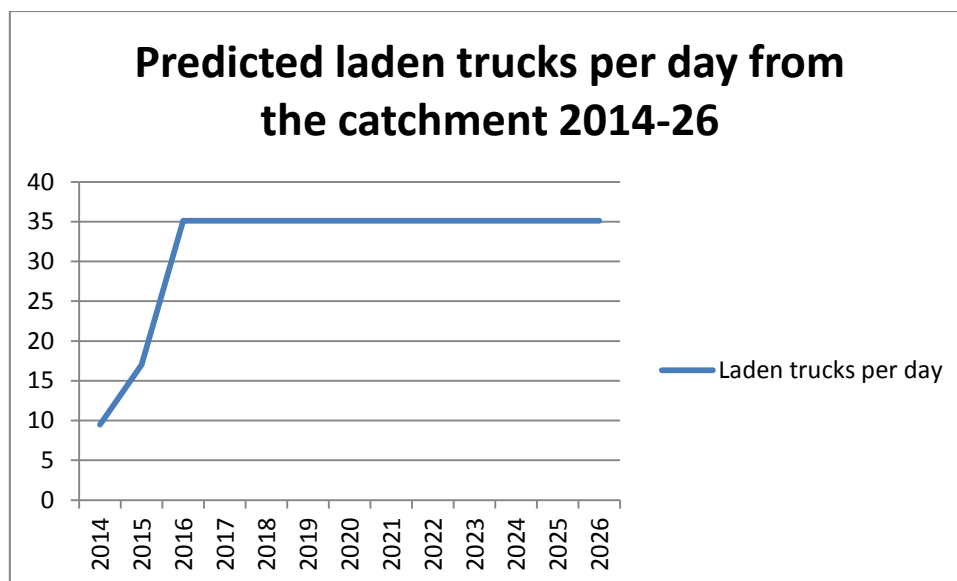


For the purposes of discussion with the Roads Authority the number of laden trucks per day is felt to give the best understanding of what these volumes mean in reality. For simplicity, calculations are based on the following assumptions:

	Assumed working values	Maximum realistic values
Truck payload (tonne)	25	27
Working weeks per annum	40	44
Working days per week	5	6

There is a deliberate margin between the assumed and maximum realistic values in the table above, to allow for the many variable factors which will conspire to reduce the efficiency of the haulage operation. These will make it "peakier" in nature, rather than any assumed average flow, making any disruption more difficult to manage. Such factors are, for example, restrictions due to snow and freeze- thaw conditions in winter, breakdowns, holidays, other operators using the agreed road capacity, rate of harvesting etc.

On the basis of these assumed figures a single working truck will take 5,000t from the area per annum. In other words the volumes now predicted will require 30-40 truck laden journeys per day from the catchment over the 11 year period between 2016 and 2026. No single track road in the Highlands is known to carry such timber volumes over such distances.



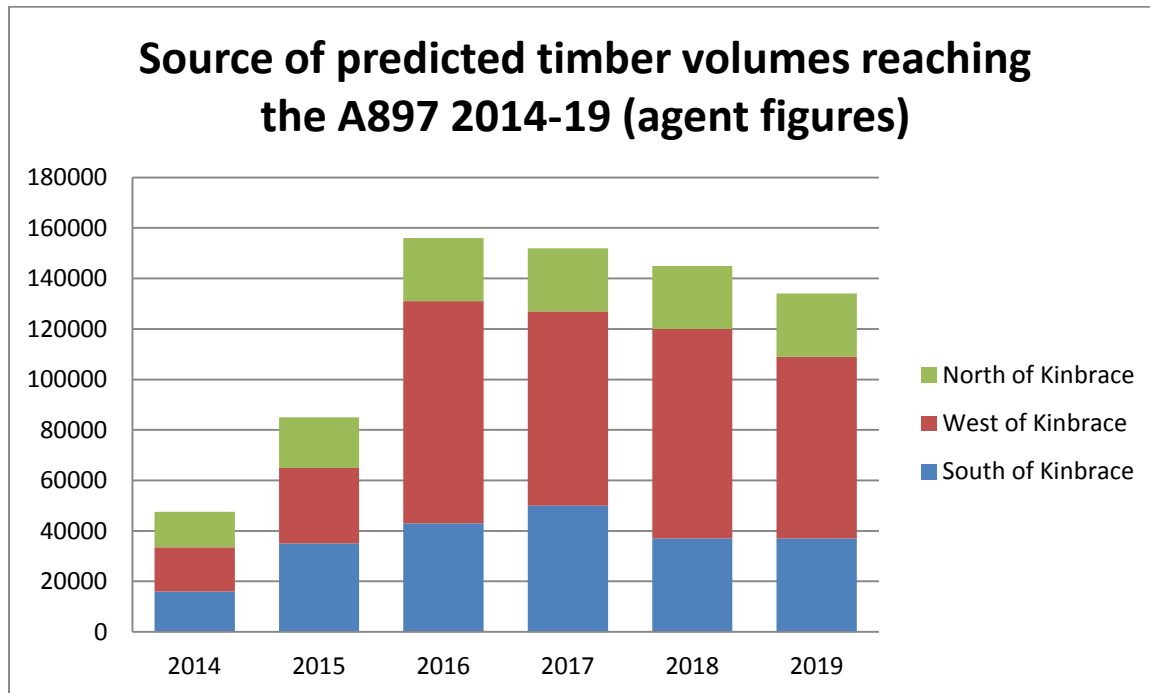
To put this in context the timber removed from the catchment to date has mainly been from the National Forest Estate at Rosal and Syre, both now privately owned. It is understood that an average of 15,000 tonnes per annum has been harvested there over a period of seven years, the resulting traffic being an average of less than 4 trucks per day taken over the year. On occasion there have been peaks in timber traffic, when private sector forests have also been harvesting but the volumes removed do not bear comparison with what is now required. Instead of the 15,000 tonnes per annum in previous years the step change in 2016 will require the removal of an average of 175,000 tonnes per annum, over ten times as much; and this must be sustained for a decade or more.

This matter was discussed at the HTTG meeting in June 2014, when it was felt that the current position was unsustainable and avenues of funding and support needed to be explored to deliver a solution. Key issues needing further action were:

1. Further discussion should take place with the Roads Authority regarding the capacity of the roads in the area to take timber traffic.
2. The Rail Option must be bottomed out for once and for all as it would still seem to be able to provide a major component of the solution

Assessment of the Public Road Capacity

The output information from agents for the 2014-2019 period was analysed by sub- catchment location in order to assess the likely capacity demand on the various public road links. This is shown on the following graph:



The large catchment area is served by only three roads, providing exit as follows:

- The A897, running 60km from Helmsdale to Melvich, providing exit for timber at both ends.
- The B871, running from the A897 at Kinbrace to Syre (25km) and on towards Bettyhill (15km). Exit for timber only allowed at Kinbrace.
- The B873, running from Syre to Altnaharra (20km). No exit for timber traffic

The immediate challenge is to enable timber subject to agreed felling plans in 2014-2016 to get to market, recognising the more difficult future position. A meeting was held with senior Council management of the Sutherland and Caithness area on 14 July 2014 to discuss these developments and review the information available. Agreement has now been reached with the Council as follows:

Road	From/to	Length (km)	Consultation route status
A897	Helmsdale-Kinbrace	27	The section from Kinbrace to Helmsdale had previously been agreed at 4 trucks per day, 20kt per annum. This will now be increased to a maximum of 6 trucks per day, subject to road improvements. (30ktpa)
	Kinbrace - Forsinain	18	In the absence of the Syre to Bettyhill section being improved, some trucks could go north from Kinbrace, although this would be restricted by the need to share capacity on the Forsinain to Melvich section.
	Forsinain - Melvich	16	Traffic has previously been discouraged from using this section, in support of the FCHR. However, subject to agreement over improvements, 4 trucks per day will be permitted. (20ktpa)
B871	Syre – Kinbrace	26	A limit of six trucks per day is proposed although this will be restricted by the need to share capacity on the A897 beyond Kinbrace. This road will require considerable works to make this sustainable (30ktpa in total)
	Syre - Bettyhill	15	Timber traffic has traditionally been excluded from this route. It is narrow and winding and would require considerable upgrading before timber traffic would be allowed. A limit of 4 trucks per day is proposed were this to happen.
B873	Syre - Altnaharra	19	Timber traffic continues to be excluded except for forest access, and, when agreed, for empty return loads to Syre/Rosal/Rimsdale

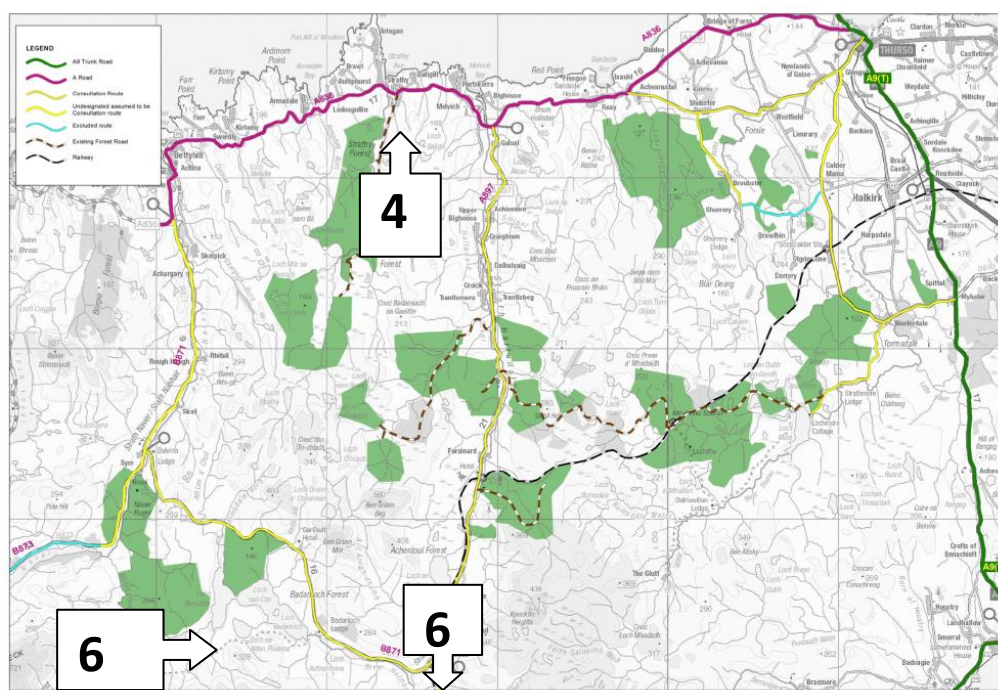


Figure 3: Map indicating currently permitted timber truck flows

In agreeing to these limits the Council proposes to apply to the STTS for assistance to carry out a series of improvements to the A897 and B871, as an alternative solution to the failed FCHR project.

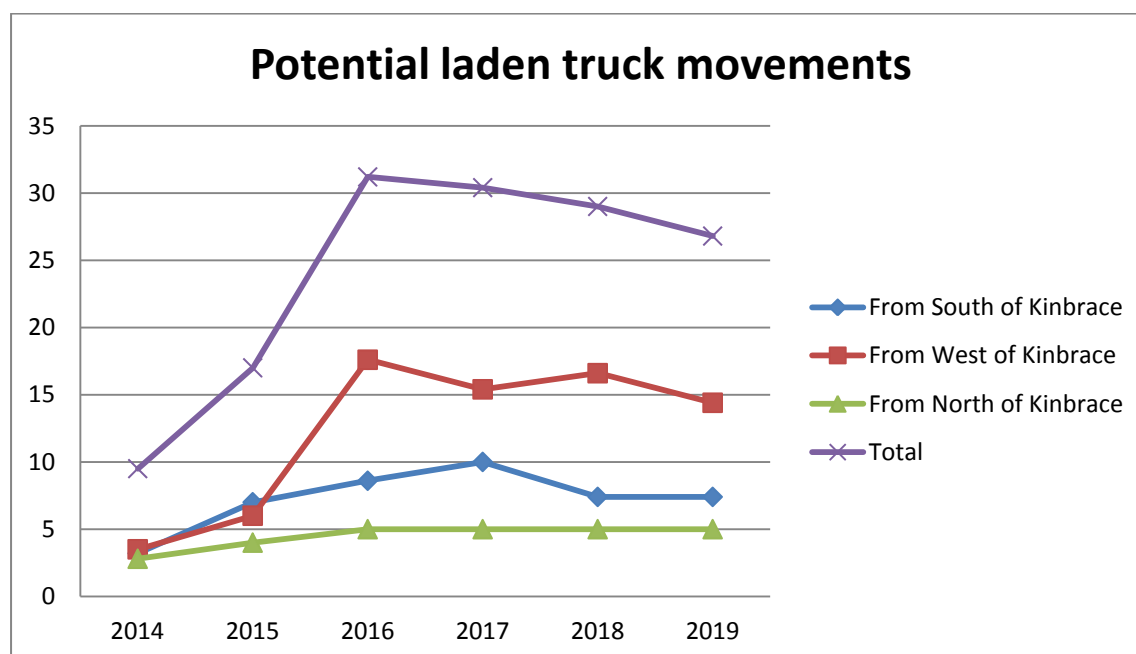
It is hoped that these works will enable the limits to be relaxed somewhat after the works have been completed and subject to satisfactory performance of the roads. Timber Transport Management Plans will be strictly enforced, and it will be important for the industry to cooperate with the Council and other operators to ensure success

Review of Capacity Constraints

It is clear that there is a major gap between the currently agreed road capacity out of the catchment and the demand in the decade from 2016:

	Currently agreed	Potential demand	Deficiency
Trucks per day	10	35	25
Tonnes per annum	50,000	175,000	125,000

The following graph shows the expected demand for capacity, from the different parts of the catchment:



Using the above information the following table assesses where the constraints will be felt most. Market forces will influence where the timber is sent, but in the short to medium term the availability of access capacity is likely to be the determining issue:

Location of timber	Potential demand (trucks per day)		Permitted	Remarks
	2014 2015	2016 and on		
From South of Kinbrace, expected to go South	4-6	7-10	6	Appears to be possible in the short term. Difficult beyond 2016 without rail.
From West of Kinbrace, expected to go North or South depending on access availability	4-6	15	6	Short term may be possible with capacity sharing. Extremely difficult beyond 2016. Even if the B871 to Bettyhill route is upgraded providing an extra 4 trucks per day, there will remain a capacity problem on A897 north and south. This area would be the key candidate for rail uplift from Kinbrace
From North of Kinbrace, expected to go North	4-5	5	4	Appears to be possible, with good cooperation and management

The Potential for Rail

The deficiency between the agreed exit capacity of the road network and the demand in 2016 is 125,000 tonnes per annum, requiring an increase, beyond the agreed limits, of 25 trucks per day. This presents a huge challenge to the Council and industry and at present it remains unclear how this gap can be bridged, without the use of the rail network. A 500t train operating 6 days per week for 40 weeks per annum could carry 120,000 tonnes and solve the matter. Additional work need to be done to determine if this can be made economically viable and this will be carried out by the HTTG in association with HITRANS, the Council, FCS and the industry.

The timber volumes discussed above do not include the wider Flow Country area East of Altnabreac where there are substantial additional rail accessible timber reserves, as well as the wider Caithness area. The existing rail sidings at Georgemas Junction offer the opportunity to uplift some of this crop directly without the difficulties associated with railside loading..



Picture 3: Railside timber waiting uplift at Kinbrace 2003

Summary

This Strategy has been time limited to the period up to 2016, after which it will be reviewed. It has sought to take a longer term view but, at this moment in time, it is simply not possible to define how the huge volumes of timber maturing in the area will eventually get to market. With the Flow Country Haul Road off the table the only realistic options are the existing public road and rail networks.

The timber in the A897 catchment can provide feedstock for the expanding timber and biomass markets in the Highlands and must be harvested on time if it is not to suffer windblow and degrade. The vital elements of the extraction strategy identified for the next two years are:

- A series of STTS assisted improvement works to the A897 and B871 to maintain and increase road capacity
- A study and possible trial of rail alternatives to establish logistics and costs

Completion of the works and the rail study will define what happens in 2016 and beyond. If the improved roads are found to respond reasonably well to the increased traffic it may be possible for the Council to relax the currently agreed limits to some extent. Rail has the potential to resolve the problem but it remains to be seen if it can deliver. There is now an urgent need to get answers to these unknowns.