LOGISTICS OF TRANSPORTING TIMBER IN IRELAND USING VARIOUS HAULAGE METHODS

The forests of Ireland are under the control of Coillte Teoranta (the Irish Forestry Board). When the forests are to be harvested Coillte contract the work to companies with expertise in this field. The present transportation system used by these contractors is causing much structural damage to the roads in the vicinity of the forests being harvested. Coillte are taking the majority of criticism from both local residents and politicians in relation to the state of the roads after work has been carried out on any particular forest.

The primary objective of this project is to examine the logistics of transporting timber in Ireland using five different methods to compare the cost effectiveness (or lack thereof) of each method. A secondary objective is a closer examination of the most inexpensive method of timber transportation to see if alternative methods of using this vehicle, or combination of vehicles can be found. The reason for this is to find a balance between a cost effective method of transporting timber and a minimisation of structural damage caused to roads in the vicinity of the forests. A computer model was set up in order to carry out the logistical investigation outlined above.

It was found that using a rigid body truck and trailer was the most cost effective method of transporting timber in Ireland. It was also found that the present method of use of the rigid body truck and trailer was on average 30% cheaper than a proposed method. The proposed method was to operate the rigid body truck and trailer at a reduced load of 15 tonnes on the poorer quality roads in the forest proximity. This has two major advantages over the present system in that firstly the rigid body truck was now operating under the legal limits of weight restrictions and secondly the structural damage caused to the roads is decreased due to the reduction in the weights being carried on the poorer quality roads of 50%.