Economic valuation of landscape fragmentation

The aim of this study is to shed light on the value of landscape fragmentation impacts. The prime causes of landscape fragmentation are the construction of line infrastructures, notably roads or rail, and urban development. In this study we focus on the effects of transport networks on the fragmentation of green-blue networks – rural areas that host (mainly) green land uses such as agriculture and natural areas, and water. The segmentation of green-blue areas and the associated loss in the value of services from these land uses can be viewed as an external cost of transport. From a policy-making perspective it is important to have a full picture of the costs (and benefits) of alternative designs of transport network. The omission of potentially important impacts, such as the fragmentation of green-blue networks, could lead to lower quality decisions by transport planners and policy makers. In an economic sense this leads to welfare losses due to a suboptimal allocation of resources.