

Assessment of Forest Land Transport Access Based on Updated GIS Procedure Applications in Archangelskaya Region Case Study

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The paper presents findings of studies to assess Archangelsk region forest resource lands transport access as well as feasibility analysis of forest regeneration and forest treatment operations and selective cuts due to road density.

Unlike earlier studies this transport access assessment is arranged on updating of road data from OpenStreetMap resource based on Landsat 8 imagery interpretation results within forest sub-districts. Territory zoning due to forest resource land transport access and feasibility analysis of forest regeneration, forest treatment and selective cut operations was done with regard to B. Kuvaldin guidelines presented in his «Roads in forest management units» monograph.

The study findings enabled updating of Archangelsk region forest lands transport access and feasibility analysis of various operations due to forest transport access and definition of required road construction within forest districts for forest management pattern optimization.