

## عنوان مقاله:

Optimum Route election for Oil and Ga Transmission Lines Using Remote Sensing and GIS Integration

## محل انتشار:

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## خلاصه مقاله:

One of the most important developmental procedures for the implementation of oil and gas transmission projects is through pipelines. Route selection is a crucial step in the planning of transmission lines. In this regard, to choose applicable and optimal route is likely to be complicated. Many factors need to be taken into consideration hence this is a very important stage in the transmission lines project. Using remote sensing (RS) and geographic information systems (GIS), new valves for routing will be unlocked and the costs of inaccuracies and inappropriate plans will be significantly reduced. The first modeling stage for planning and routing is defining the factors that determine the route of transmission of oil pipelines. There are diverse effective factors in determining the route to the transmission pipeline projects. Also, the proportion of the impact of each of these factors must be identified. The weight of the factors, is determined by various methods. These factors include roads, rivers, landslides, faults, gradients of land, soil science, land use, geology, recreational areas and protected areas. Finally, the cost of transfer plan for each pixel is designed using the multi-criteria decision making model and the AHP method in the GIS environment. Using this map, a cumulative cost map for the origin and destination is designed.

## کلمات کلیدی:

Remote Sensing RS, GIS Geographic Information System, Routing Transmission Lines

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1490168>

