

EFFECTIVENESS OF ANALYSIS OF VISUALIZED SNOW REMOVAL OPERATION RECORDS TOWARD THE ESTABLISHMENT OF SNOW REMOVAL DEPLOYMENT SUPPORT SYSTEM

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ABSTRACT

In snowy cold regions, road administrators need to mitigate the great hindrances to road traffic posed by snowfall and snow cover by providing efficient, effective winter road management. To this end, decisions need to be made on the optimal timing of deployments and operations of snow removal vehicles. However, there has been little quantitative study on the relation between snowfall conditions and snow removal operation methods. In addition, little post-operation efficiency analysis has been carried out on the timing of deployment and the routes of snow removal operations.

Toward developing a decision-making support system for the optimal deployment timing and organization of snow removal vehicles according to the snowfall conditions, The authors studied a method of visualizing data of snow removal vehicle operations and we confirmed that the method can provide an easy understanding of the changes in organization and operation of snow removal vehicles in a group, the changes in routes and the progress in operations conducted by adjoining snow removal depots.

Also, because the visualizations show details of each vehicle's operation, our method can be used for identifying factors associated with inefficient operation and for reviewing snow removal routes and echelon formation plans.

本論文閲覧ご希望の方は、直接、当該学会等にお問い合わせ下さい。