An ** -Norm Regression Approach to the Two-Level Hierarchical Transportation Network Problem

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Abstract

Singhal proposed a transportation problem and solution dealing with transportation networks having "trunk" (primary) and "feeder" (secondary) branches, using a regression approach based on minimizing the sum of the absolute values of the residuals to find the minimum-cost solution. We propose a combined LP/trigonometric solution for finding the primary and secondary distances of the network. This solution is simple, convenient and computationally fast. Included are proofs of the trigonometric solution.

Keywords: L1_Norm Regression Approach, Hierarchical al Transportation tion Network Problem.