

Use of steiner problem in solving practical problems of road construction

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Abstract

© by the author(s). Currently, the development of road networks is growing rapidly. There is a need in the accession of new sections to the existing roads. The present work sets the task of finding Steiner points for three points. While carrying out this work, there was learnt the basics of graph theory, the methods of finding shortest networks and defined the Steiner problem. There was also implemented an application in Delphi 2010 determining the Steiner point, the minimum path (section) length, and calculating travel time and approximate cost of construction for the resulting road section.

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Keywords

Minimum distance, Road networks, Steiner points, Steiner problem