Regeneration of origin-destination matrices from traffic counts: State of the Art

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Abstract

The concept of re-engineering has taken hold in several disciplines within Civil Engineering. Although this methodology has been used for some time, the concept is relatively new. Hence, at the moment, there is no widely agreed definition. In this paper we consider re-engineering as the knowledge of a tool, an input, an operation, a structure, a facility or even an ecosystem based on the value of certain operational parameters.

In transport engineering, knowledge of the origin-destination matrix for private vehicles is fundamental to simulate, by means of algorithms for traffic assignment to the network, the behaviour of traffic in the strategic road network of the Area of Study. However, the development of this matrix, using the traditional methodology, implies carrying out a costly household survey campaign among a random and representative sample of the population.

This is the reason why reverse re-engineering applied to transport has gained high acceptance. This paper will show an updated state-of-the-art regarding the application of this methodology based on the latest scientific research

References

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