

Rationality, garbage cans, public engagement and quantitative methods in transportation planning

Ennio Cascetta

Dipartimento di Ingegneria dei Trasporti “L. Tocchetti”

Università degli Studi di Napoli Federico II

E-mail: ennio.cascetta@unina.it

Abstract

Failures in transport-related decision-making abound in real life, both in the domain of public choices and private enterprises. Problems in transportation planning are due to a number of reasons including the gap still existing between the traditional technical approach, based on economic rationality, and real-life processes.

The quality of the decisions depends critically on the process followed to reach them. Planning and designing transportation systems should expressly be recognized as managing complex, multi-agent decision-making processes in which technical and communication abilities should both be involved in order to design solutions which are consistent and, at the same time, maximize stakeholders' consensus.

The lecture discusses different models representing real-life transportation planning processes, exploring different levels of rationality (including a-rational ones), and highlighting the role of Public Engagement in the process.

The lecture propose a methodology to attain more transparent and participated transportation planning processes integrating cognitive decision-making, Public Engagement and quantitative analyses.