



Welfare economic impacts of transportation improvements in a peripheral region

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Abstract

We set out to investigate whether transportation improvements can trigger welfare economic impacts in a peripheral region. The paper addresses this issue through the development of a general equilibrium labor market model with a transportation component. The model is implemented to a set of 101 core and peripheral cities in Israel. Numeric simulations are carried out to test the research hypotheses regarding positive relationship between improved accessibility and enhanced economic welfare. Economic welfare is measured in terms of efficiency and equity impacts. The results of the simulations show that transportation improvements in the form of auto travel time reductions may lead to substantial welfare benefits in the peripheral region considered in terms of increased output, productivity and wages.

Keywords: Travel time; Wage differentials; Productivity; Output; Transportation improvements.

1. Introduction

In recent years there has been a growing interest in the mechanisms linking a barrier-free geography and economic efficiency and equity. A common claim put forward by many urban economists, transportation planners and regional scientists is that transportation improvements extend the borders of labor markets, thus contributing to enhanced welfare by widening the scope of opportunities for consumers and producers alike.

Transportation investments have been identified in the literature as one of the main contributors to regional development and to the enhancement of economic growth. Although the strength and causation of the transport-growth relationship is a highly controversial issue in regional science, there is a general consensus amongst researchers that underserved regions with development potential are likely to benefit from such improvements (Frederiksen, 1981; Deno, 1988; Martin, 1998; McCann and Shefer, 2004).

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