Department of Management and Information Sciences

Key words

transportation economics, regional science, urban policy, logistics









Master of Science in Policy and Planning Science / Associate Professor

Tomonori Kondo

Education

School of Commerce, Waseda University

Graduate School of Business Administration and Public Policy (Mater Program), University of Tsukuba

Professional Background

Staff at Ibaraki prefectural government office

Consultations, Lectures, and Collaborative Research Themes

Analysis of concentration of urban areas in local cities and Improve marine container logistics efficiency by utilizing local ports

e-mail address

t-kondo@fukui-ut.ac.jp

Main research themes and their characteristics

Estimation of population density levels for sustainable regional public transportation

In various regions of Japan, it is becoming increasingly difficult to maintain local public transportation services due to a decrease in the number of passengers caused by population decline and other factors. On the other hand, despite a certain level of demand, an increasing number of railroads and buses are forced to reduce service frequency or discontinue routes due to a shortage of drivers, resulting in serious social problems such as the loss of means of commuting to work and school and the emergence of vulnerable shoppers.

The purpose of this study is to clarify the population size and population density level required to maintain public transportation in urban areas of regional urban areas, by mode of transportation. The main objective of this study is to clarify the population size and population density level that will allow transportation operators to operate independently based on realistic population levels. The desirable regional public transportation system will be discussed by presenting the desirable population density level in the residential guiding zone for the formation of a compact plus network type city, and by analyzing the relationship between the projected future population change and the network along the railway line.



Figure 1: Residences along rail and bus lines in Fukui City

Improvement of the efficiency of marine container logistics

In domestic logistics, issues such as driver shortages and reduction of greenhouse gas emissions have been pointed out in the past, and a smoother logistics system is required from the perspective of improving the efficiency of corporate management.

In the field of marine container transport, container sharing for inland transport has been implemented as a concrete measure to solve these issues, and is attracting attention as an example of combining the reduction of empty cargo transport, joint logistics through corporate collaboration, and the establishment of relay bases through the cooperation of shippers, consignees and logistics companies. This study analyzes the conditions necessary for container sharing to become widespread, using quantitative data on cargo volumes and distances between ports and cargo origins and destinations.

In addition, the development of regional ports in Japan is progressing, and there is a growing possibility that connecting these ports to major ports can be used as a new means of improving logistics efficiency. This study analyzes the conditions necessary to promote the use of local ports and the issues that need to be addressed.

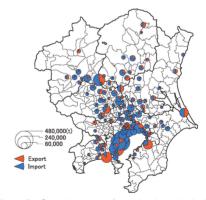


Figure 2: Container import/export volume in the Tokyo metropolitan area

Major academic publications

T.Kondo, K.Kazui, Y.Kawabata, D.Nogiwa, "An Analysis on Concentration and Diffusion of Population Distribution in Local Cities Based on Regional Mesh Data -Case study on Toyama City, Kanazawa City and Fukui City-", Papers on city planning No.56(3), pp.579-586, Oct 2021.

T.Kondo "Improvement of Logistics Efficiency through Container Sharing at Inland Container Depots –Focusing on Shipper-Driven Operation Method in Kanto Region-", Journal of Logistics and Shipping Economics No.57, pp.31-40, Oct 2023.