

博士論文（要約）

Short-Term Transportation Policy in Developing Countries:  
Exploring Policy Processes, Outcomes, and Impacts in  
Thailand from a Digital Divide Perspective

(発展途上国における短期交通政策：情報格差に着目したタイにおける政策過程  
、結果及び影響の分析)

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Short-term policy (STP), which is typically used to solve urgent problems, has attracted considerable attention as a form of time-related public policy. In developing countries, STP may be damaged by poor governance, especially given the short timeframe of such policies. STP performance is typically affected by the dissemination of policy information to citizens. One problem with regard to STP is that the effectiveness of these policies can be damaged by inequality between the information-rich and the information-poor in receiving STP information, a gap known as the digital divide. Questions have been raised regarding how governments in developing countries can reduce the negative impacts of STP. This dissertation attempts to clarify the mechanism of STP development and its impacts from a digital divide perspective and to propose policy implications for Thailand and other developing countries.

This dissertation explores STP processes, outcomes, and impacts through the lens of the digital divide. Three research approaches were conducted using Thailand's first-car buyer policy (FCBP), a short-term transportation policy (STTP), as a case study. To achieve the research objective, this study first carried out a qualitative analysis. This analysis characterizes key issues in the STTP process and discusses the consequences of this process in terms of information-seeking behavior among rural people in Thailand. Semi-structured interviews were conducted with five government officials and 39 residents of rural areas in December 2019, and a well-established qualitative analysis was applied to evaluate the documentary evidence. Data management and analysis were performed using the ATLAS.ti software. The findings show that the dissemination of government information and its consequences are the main issues in the STTP process. They also reveal that some rural people tend to passively seek government information during STTP implementation and that limited time resources, poor concerns among rural people about government policy, and substandard Internet access were major obstacles to this information-seeking behavior among rural people in Thailand.

Next, an analysis of STTP outcomes was introduced as the second approach with the aim of investigating what might cause these problems in the STTP process at the macroscopic level. The FCBP dataset, which covers 77 provinces in Thailand in 2012, was used in this macroscopic analysis. It is first investigated the mediating role of the digital divide in the associations between socioeconomic factors and STTP outcomes in Thailand. Structural equation modeling was used to generate a model. The results show that population density, per capita income, urbanization, and the population of individuals

aged 30 to 34 had negative effects on the digital divide. The digital divide was negatively associated with benefiting from STTP, while economic activity, urbanization, and the population of individuals aged 30 to 34 had indirectly positive links with benefiting from STTP. These results indicate that the relationships between socioeconomic factors and STTP outcomes are partially mediated by the digital divide. Since the results of the structural equation modeling did not address the geospatial effects, a robustness test was required. Spatial econometric modeling was thus applied to the same dataset to investigate spatial dependence patterns in STTP outcomes and estimate the effects of the digital divide on those outcomes. The results indicate spatial distribution in STTP outcomes with positive spatial autocorrelation across Thai provinces. The spatial distribution tended to be high–high in the central and eastern regions and primarily low–low in the northeast region. The results also show that Thai provinces’ STTP outcomes may be influenced by the digital divides in neighboring provinces within Thailand. Additionally, this study revealed that urbanization, economic activity, and age significantly positive affected STTP outcomes. These results were consistent with the previous findings.

For STTP impacts analysis, this analysis empirically investigates the impacts of the STTP and the digital divide on individual income levels using micro-level data from a questionnaire survey conducted in Khon Kaen, Thailand, in January 2021. The local survey included 554 respondents identified through multistage sampling. A quasi-experimental approach was applied to estimate impacts using difference-in-differences, triple differences, and matching methods. The results show that the STTP positively affected individual income levels and that having Internet access led to more positive STTP impacts on individual income levels. It can therefore be assumed that the impacts of STTP and the digital divide may have reproduced existing poverty and inequality in society.

Based on these findings, the proposed STTP mechanism was clarified and confirmed with macro- and micro-scale empirical evidence. Three main policy implications were derived from these findings to reduce the negative impacts of STTP: (1) governments should recognize the digital divide and related issues; (2) governments should improve e-government systems and the digital capacity of government officials; and (3) governments should incorporate inclusive strategies into the STTP process.