



SUMMARY

A Study on Changes in Spatial Use of the Territory after Opening of Honam KTX

Kim Jonghak, Kim Junki, Chung Jinkyu, Bae Yunkyung, Choi Jaesung

This research is to ascertain active population distribution change around KTX stops and their expenditure change according to Honam KTX opening. It has been a year since Honam KTX opened and it is necessary to explore its territorial space use change.

3 tasks for territorial change analysis were drawn based on implication from KTX stops field research and character of bigdata. Task 1 is analysing active population change around KTX stop using mobile bigdata. Task 2 is analysing credit card expenditure change of externally migrated population before and after Honam KTX's open. Task 3 is analysing spatial distribution change of active population in KTX stop cities before and after Honam KTX's open.

Mobile bigdata analysis showed that active population around KTX stops has increased than before Honam KTX opened. Also, the center of activity in KTX stop cities has moved to the KTX stop direction. The reason of this result looks like growing population and building new apartment complexes around KTX stops.

Credit card bigdata analysis showed that credit card expenditure of people within 500m radius who resides in Gwangju has increased by 43.2% than before Honam KTX opened. Credit card expenditure of people who resides in Seoul around Songjeong station in Gwangju has increased by 71.7%. These results showed that both regions are growing positively.

Also this result implied that KTX establishment has positive effect such as win-win growth and alleviation of differences between regions. This can be used as expected effect for the future high speed transportation network expansion.

Time and spatial compression effect by KTX opening resulted in 22.4%. This result can be used for comprehensive performance index that encompassing spatial and transportation. To continue positive effect of KTX stops and induce externally migrated population, policies to improve facilities for walking and transfer and local area development policies to promote the local small business.