

C310281 : MAJOR GEOGRAPHY

KEY WORD: GEOGRAPHIC INFORMATION SYSTEM / PRE-CENSUS / CHON BURI
MUNICIPALITY

PATIMAKORN SANOM : APPLICATION OF GEOGRAPHIC INFORMATION SYSTEM
FOR PRE-CENSUS PLANNING : A CASE STUDY OF CHON BURI MUNICIPALITY.
THESIS ADVISOR : ASSO. PROF. SRISARD TANGPRASERT. CO-ADVISOR :
ASSO. PROF. PONGSRI CHONHOW. 123 pp. ISBN 974-853-929-9

This research has applied Geographic Information System for the delineation of census blocks and the planning of the shortest survey routes for each block within the Chon Buri Municipality.

According to the condition set by the National Statistics Office that the census should be carried out within 4 days, each census block for the past census was arbitrarily designated to contain 150 - 200 households, should the average interview lasted about 15 minutes and 2 interviewers were provided for each block.

In order to achieve the optimum work plan, the relationship between the number of household and the distance between them was considered in the automated delineation using the software Arc/Info.

From the analysis, there are 44 blocks. The total survey distance within each block ranges from 370 meters to 6 kilometers. The number of households in each block, varying with the spatial distribution of houses, are from 150 to 200. For the whole area, the number of interviewers needed is 88 persons. Besides the census block map, to enable the interviewers to work efficiently a map of shortest route for each block and related information are also prepared.