

CAN BIGDATA HELP IN THE PRODUCTION OF RELIABLE LOCAL AREA STATISTICS?

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The demand for various socio-economic and health statistics for small geographical areas is steadily increasing at a time when survey agencies are looking for ways to reduce costs to meet fixed budgetary requirements. In the current survey environment, the application of standard sample survey methods for small areas, which require large sample, is generally not feasible from the cost consideration. One of the key factors that lead to the success of small area methodology, which typically uses implicit or explicit models to combine survey and administrative data sources, is the availability of strong auxiliary variables. The accessibility of big data from different sources is now bringing new opportunities for statisticians to develop innovative small area methods. In this talk, I will discuss the hierarchical Bayesian methodology for exploiting BIGDATA in producing reliable local area statistics.