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[OJCE](#) > Vol.2 No.3, September 2012



Changes in Land Use, Socioeconomic Indices, and the Transportation System in Gifu City and their Relevance during the Late 20th Century

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ABSTRACT

History provides valuable lessons for the interplay of factors that shape urban growth and development. This study examines changes in land use, socioeconomic indices, and the transportation system of Gifu City during the late 20th century using geographical information system (GIS) methods. The data for the study were historical maps and the population census and economic statistics data from 1950 to 2000, when Japan was in a period of high economic growth. The discussion focuses on the master plan, road construction, land use, the spatial distribution of the population, and socioeconomic indices. It was possible to compare spatial distribution patterns over time using GIS. When policies were created that attached importance to construction of a road network due to the development of motorization and elimination of the city tram, the surrounding suburban area became the focus of land-use development. As a result, Gifu City is plagued by the doughnut phenomenon. It is important to identify the relationships among urban planning factors to provide for future urban and transportation planning.

KEYWORDS

Urban Planning; Land Use; Transportation System; Socioeconomic Indices; Geographical Information Systems

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