A Study of the Adaptive Reuse for School Land Use Strategy: An Application of the Analytic Network Process and Big Data

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Abstract : In today's popularity and progress of information technology, the big data set and its analysis are no longer a major conundrum. Now, we could not only use the relevant big data to analysis and emulate the possible status of urban development in the near future, but also provide more comprehensive and reasonable policy implementation basis for government units or decision-makers via the analysis and emulation results as mentioned above. In this research, we set Taipei City as the research scope, and use the relevant big data variables (e.g., population, facility utilization and related social policy ratings) and Analytic Network Process (ANP) approach to implement in-depth research and discussion for the possible reduction of land use in primary and secondary schools of Taipei City. In addition to enhance the prosperous urban activities for the urban public facility utilization, the final results of this research could help improve the efficiency of urban land use in the future. Furthermore, the assessment model and research framework established in this research also provide a good reference for schools or other public facilities land use and adaptive reuse strategies in the future.

Keywords: adaptive reuse, analytic network process, big data, land use strategy

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