

Research on Spatial Allocation Optimization of Urban Elderly Care Facilities Based on ArcGIS Technology

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Abstract : With the development of The Times, the elderly demand for pension service facilities is increasing. Taking 26 street towns in Jiangjin District of Chongqing as examples, ArcGIS spatial analysis method was used to analyze the distribution status of the elderly population, the core density of the elderly population, and the spatial layout characteristics of institutional elderly care facilities in Jiangjin District of Chongqing. The results showed that there were differences in the structure and aging degree of the elderly population in each street town. There is a certain imbalance between the spatial distribution of the elderly population and the planning and construction of elderly care facilities. The accessibility of elderly care facilities is uneven. Therefore, a genetic algorithm is used to optimize the spatial layout of institutional elderly care facilities, improve the accessibility of facilities, strengthen the participation of multiple subjects, and provide a reference for the future construction planning of elderly care facilities.

Keywords : institutional pension facilities, spatial layout, accessibility, ArcGIS

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