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## Analysis of the Spatial Distribution of Public Girls' and Boys' Secondary Schools in Riyadh

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**Abstract :** This study examines the spatial distribution of secondary schools in Riyadh. It considers both public girls and boys sector provision and assesses the efficiency of the spatial distribution of secondary schools. Since the establishment of the Ministry of Education (MOE) in 1953 and General Presidency for Female Education, (GPFE) in 1960, there has been a great expansion of education services in Saudi Arabia, particularly during the 1980s. However, recent years have seen much slower rates of increase in the public education sector but the population continues to grow rapidly. This study investigates the spatial distribution of schools through the use of questionnaire surveys and applied GIS. Overall, the results indicate a shortage of public secondary schools, especially in the north of the city. It is clear that there is overcrowding in the majority of secondary schools. The establishment of new schools has been suggested to solve the problem of overcrowding. A number of socioeconomic and demographic factors are associated with differences in the utilization of the public secondary schools. A GIS was applied in this study in order to assess the spatial distribution of secondary schools including the modification of existing catchment area boundaries and locating new schools. This modification could also reduce the pupil pressure on certain schools and further benefits could probably be gained.

Keywords: analysis, distribution, Saudi, GIS, schools

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