



## EVALUASI ZONASI PENERIMAAN PESERTA DIDIK BARU SMA NEGERI DI DAERAH ISTIMEWA YOGYAKARTA DENGAN PENDEKATAN ANALISIS SPASIAL

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### INTISARI

Pelayanan pendidikan harus mampu melayani setiap warga negara Indonesia. Penerimaan Peserta Didik Baru (PPDB) menetapkan sistem zonasi dengan tujuan untuk memeratakan akses layanan pendidikan dan mendekatkan lingkungan sekolah dengan lingkungan keluarga/rumah calon peserta didik. Provinsi DI Yogyakarta merupakan salah satu wilayah yang sudah diterapkan sistem zonasi dalam PPDB, yang dilaksanakan pada SMA Negeri di provinsi tersebut. Namun dalam praktiknya ditemukan permasalahan berupa ketersediaan SMA Negeri yang kurang merata dan pembagian zonasi yang kurang adil. Dengan demikian perlu dilakukan evaluasi terhadap persebaran lokasi sekolah dan zonasi di Provinsi DI Yogyakarta. Penelitian ini bertujuan menganalisis tentang 1) pola persebaran SMA Negeri, 2) persebaran spasial zonasi PPDB, dan 3) kesesuaian antara persebaran SMA Negeri dan persebaran zonasi PPDB.

Penelitian ini dilakukan dengan menggunakan analisis spasial berupa Analisis Tetangga Terdekat, analisis *buffer* dan *overlay*, skoring, serta iterasi. Analisis Tetangga Terdekat (ATT) digunakan untuk mengetahui pola persebaran SMA Negeri. Analisis *buffer* dan *overlay* digunakan untuk menganalisis persebaran zonasi. Analisis skoring digunakan untuk mengetahui kesesuaian antar wilayah yang menggunakan parameter berupa radius penerimaan peserta didik 300 meter, radius zona pelayanan sekolah menengah 6 kilometer, zonasi tetapan pemerintah, serta jumlah penduduk usia sekolah. Analisis iterasi digunakan untuk mengetahui perbandingan antara jumlah penduduk ideal yang dapat dilayani sekolah menengah dan luas cakupan pelayanan berdasarkan jumlah penduduk.

Berdasarkan hasil Analisis Tetangga Terdekat diketahui sebaran lokasi SMA Negeri di Provinsi DI Yogyakarta adalah kategori acak atau *random*. Berdasarkan hasil analisis *buffer* diketahui bahwa sebanyak 78% dari seluruh wilayah DI Yogyakarta sudah mendapatkan pelayanan setidaknya satu unit SMA Negeri. Wilayah DI Yogyakarta dibagi menjadi 4 kategori; wilayah yang kurang sesuai karena terlalu banyak sekolah, wilayah yang kurang sesuai karena kekurangan sekolah, wilayah yang sesuai, dan wilayah yang tidak sesuai.

Kata kunci : sekolah, zonasi, analisis tetangga terdekat, buffer, overlay



## EVALUATION OF THE ADMISSION OF PUBLIC HIGHSCHOOL NEW STUDENTS IN SPECIAL REGION OF YOGYAKARTA USING SPATIAL ANALYSIS APPROACH

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### ABSTRACT

Every Indonesian citizen deserves access to education services. Indonesia's student admission system, Penerimaan Peserta Didik Baru (PPDB) established a zoning system to fulfill the aim of equalizing access to education services to all students, and in turn bringing the school environment closer to their homes. The Special Region Province of Yogyakarta is one of the regions that has implemented PPDB's zoning system, which is obligated for all Public Senior High Schools located in the province. However, in practice, problems are found in the form of lack of Senior High School availability and unfair zoning distribution. Thus, it is necessary to evaluate the distribution of high school locations and the zoning system in Yogyakarta. This study aims to analyze 1) the distribution pattern of public high school locations, 2) the spatial distribution of PPDB's zoning system and 3) the suitability between the distribution of public high school locations and PPDB's zoning system.

This research was conducted using the use of spatial analysis in the form of Nearest Neighbor Analysis, buffer and overlay analysis, scoring, and iteration. Nearest Neighbor Analysis was used to determine the distribution pattern of public high schools. Zoning system was analyzed using buffer and overlay analysis. Scoring is used to determine the suitability between regions in Yogyakarta using several parameters such as the 300 meter radius of student acceptance rule, the 6 kilometer service zone for high schools, the zoning system, and the number of school aged residents. Iteration is used to determine the comparison between the ideal population served by high schools and the service coverage area based on said population.

Based on the results of Nearest Neighbors Analysis, it is known that the distribution of SMA Negeri locations in DI Yogyakarta is categorized as random. Based on the results of the buffer analysis, it is known that 78% of the total of DI Yogyakarta's region has received availability to at least one high school's service. DI Yogyakarta is divided into 4 categories; area not suitable because there are more schools than necessary, areas not suitable because of the lack of schools, areas that are suitable, and areas that are not suitable.

Keywords : school, zoning system, nearest neighbor analysis, buffer, overlay