ABSTRAK

SISTEM INFORMASI GEOGRAFIS UNTUK PEMETAAN ZONASI SMA NEGERI DI KOTA BANDAR LAMPUNG

Oleh

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Sistem zonasi sekolah bertujuan untuk meningkatkan pemerataan akses pendidikan, namun efektivitasnya sangat bergantung pada distribusi spasial dan ketersediaan fasilitas pendidikan. Penelitian ini menganalisis sebaran spasial dan evaluasi zonasi 17 SMA Negeri di Kota Bandar Lampung berdasarkan Petunjuk Teknis (Juknis) Penerimaan Peserta Didik Baru (PPDB) tahun 2024. Penelitian menggunakan metode kuantitatif dengan analisis deskriptif. Objek dalam penelitian ini adalah 17 SMA Negeri di Kota Bandar Lampung. Data dikumpulkan melalui dokumentasi dan observasi lapangan, kemudian dianalisis menggunakan: (1) Analisis Tetangga Terdekat (*Nearest Neighbour Analysis/NNA)* untuk pola sebaran, dan (2) *Geoprocessing* SIG dengan *buffering* untuk delineasi zona terlayani.

Hasil penelitian menunjukkan: (1) Pola sebaran SMA Negeri bersifat acak (nilai NNA = 1,14), hal ini mengindikasikan bahwa distribusi sekolah belum merata, tidak semua wilayah memiliki akses yang sama terhadap fasilitas pendidikan menengah atas.; (2) Delineasi zona *buffering* berdasarkan SNI 03-1733-2004 serta kondisi riil pada pelaksanaan Penerimaan Peserta Didik Baru (PPDB) tahun 2024 menghasilkan wilayah terlayani dan tidak terlayani. Wilayah tidak terlayani umumnya berada di kawasan suburban seperti Panjang, Telukbetung Barat, dan Sukabumi.

Kata kunci: pemetaan, SIG, zonasi, SMA negeri

ABSTRACT

GEOGRAPHIC INFORMATION SYSTEM FOR ZONING MAPPING OF PUBLIC SENIOR HIGH SCHOOLS IN BANDAR LAMPUNG CITY

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The school zoning system aims to enhance equitable access to education; however, its effectiveness heavily depends on spatial distribution and the availability of educational facilities. This study analyzes the spatial distribution and evaluates the zoning of 17 public senior high schools (SMA Negeri) in Bandar Lampung City based on the 2024 New Student Admission Technical Guidelines (Juknis PPDB). This study employs a quantitative method with descriptive analysis. The research objects are 17 public senior high schools (SMA Negeri) in Bandar Lampung City. Data were collected through documentation and field observation, and subsequently analyzed using: (1) Nearest Neighbour Analysis (NNA) to examine spatial distribution patterns, and (2) GIS geoprocessing with buffering to delineate service zones. This study employed a quantitative method with descriptive analysis. The research objects consisted of 17 public senior high schools (SMA Negeri) in Bandar Lampung City. Data were collected through documentation and field observation, then analyzed using: (1) Nearest Neighbor Analysis (NNA) to determine the spatial distribution pattern, and (2) GIS geoprocessing with buffering to delineate service zones. The results showed that: (1) the spatial distribution pattern of public senior high schools was random (NNA value = 1.14), indicating that school distribution is not yet even, and not all areas have equal access to upper secondary education facilities; (2) the delineation of service zones based on SNI 03-1733-2004 and actual conditions of the 2024 New Student Admission (PPDB) identified both served and unserved areas. The unserved areas are generally located in suburban regions such as Panjang, Telukbetung Barat, and Sukabumi.

Keywords: mapping, SIG, zoning, public senior high school