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Urban Property Crime: Examining the Relationship Between Property Crime With Land Use and Demographic Factor

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ABSTRACT

Urban property crime, such as burglary and theft, remains a critical challenge in rapidly urbanizing cities like Kuala Lumpur and Putrajaya. Despite extensive urbanization, research on the complex relationships among land use, demographic factors and crime patterns remains limited. This study employs geographic information systems (GIS) and linear regression analysis to examine how land use configurations and demographic characteristics influence property crime from 2015 to 2020. The results indicate that residential areas and transport infrastructure are the most significant land use predictors, explaining over 91% of crime variance, whereas demographic variables, including male population and household size, exhibit adjusted R^2 values exceeding 85%. The findings underscore the role of spatial and demographic factors in shaping urban crime dynamics. This study highlights the need for targeted interventions, such as crime prevention through environmental design (CPTED), enhanced surveillance and youth-focused initiatives to mitigate risks in high-crime areas. By integrating spatial and demographic analyses, this research offers a comprehensive framework for data-driven urban crime prevention strategies, with implications for policymakers, urban planners and law enforcement agencies.