

IMPACT OF POOR ROAD CONDITIONS ON TRAFFIC MANAGEMENT IN BARANGAY CAYBIGA: AN ASSESSMENT

ABSTRACT

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DISCIPLINE

Criminology

KEYWORDS

*road condition, traffic
management, the impacts of
poor road condition*

ARTICLE ID

AASGBCPJMRA-AB94404

Poor road conditions greatly affect traffic management and residents' mobility in Barangay Caybiga. This study examined respondents' demographic profiles and assessed how damaged roads, potholes, poor drainage, and lack of maintenance contribute to traffic congestion, accidents, vehicle damage, and reduced public safety. It also evaluated the effects on economic productivity and daily transportation to provide insights for improved traffic policies and road management. A quantitative descriptive research design was employed to assess the role of traffic conditions in vehicular accidents, focusing on road congestion, time of day, weather, and road surface conditions. The study involved fifty (50) respondents, including forty (40) drivers who frequently passed through Barangay 166 Caybiga, Caloocan City, and ten (10) barangay traffic enforcers. Data were collected through structured questionnaires and analyzed using descriptive statistics. Most respondents were aged 42–50, male, at the college level, and had 10 or more years of residency or service. Poor road conditions were rated as having a high impact, particularly in terms of travel delays, traffic congestion, frequent vehicle repairs, and increased transportation costs. Safety and accident-related concerns were also assessed as highly affected. The Shapiro-Wilk test indicated non-normal data distribution, while the Mann-Whitney U test showed no significant difference between the two groups ($p > 0.05$). Key challenges included lack of road signage and frequent vehicle damage, and respondents strongly recommended improving traffic management and prioritizing major road repairs. The study recommends implementing a coordinated action plan focused on road repair and maintenance, improved traffic management, and clear road signage to address the impacts of poor road conditions in Barangay Caybiga. Collaboration among residents, local government units, and other stakeholders should be strengthened to reduce traffic congestion, travel delays, and transportation costs. Continuous monitoring and future research are also encouraged to ensure effective and sustainable road management strategies.

RECOMMENDED CITATION

Aquino, P., Dadul, K. C., Enriquez, A., Osmeña, A., & Valdoz, J. D. (2026). Impact of Poor Road Conditions on Traffic Management in Barangay Caybiga: An Assessment. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts*, 8(5), 174.