

Assessment of Selected Police Area Command Facilities in Oyo State, Nigeria

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Abstract- *Police facilities play a critical role in supporting effective policing, yet many existing facilities experience functional and infrastructural deficiencies. This study assessed the physical condition, functionality, and adequacy of selected Police Area Commands in Oyo State, Nigeria, with a view to identifying priority areas for improvement. A quantitative survey design was adopted, involving 309 respondents across the selected commands. Data were analysed using descriptive statistics, Mean Score, Relative Condition Index (RCI), and a Composite Functional Performance Evaluation Model (CFPEM). Findings on physical condition showed that ventilation recorded the highest RCI (0.70), while maintenance level recorded the lowest (0.51). Functionality assessment revealed CPI values ranging from 0.52 to 0.67, with operational and security facilities performing better than detention, parking, and staff welfare facilities. Overall, the findings indicate moderate functional performance alongside significant deficiencies in supporting facilities and maintenance. The study recommends targeted rehabilitation, improved maintenance practices, enhanced staff welfare provisions, and integrated spatial planning to improve the operational efficiency and long-term performance of Police Area Commands in Oyo State.*

Keywords: *police facilities; police area commands; functionality; facility adequacy; physical condition; maintenance; oyo state.*

I. INTRODUCTION

Police infrastructure constitutes an important component of the physical environment within which law enforcement activities are organised and delivered (Tanko & Umar, 2021). Police facilities accommodate administrative, operational, investigative, security, welfare and public-facing activities; consequently, their physical condition and functional organisation can influence the effectiveness of policing and the quality of interaction between police personnel and the public (St. John et al. 2023). Police buildings also have an

institutional and symbolic role, as their architectural characteristics may influence public perceptions of safety, accessibility and reassurance (Millie, 2012). The provision of appropriate and functional police facilities is therefore important not only for supporting police operations but also for creating environments that respond adequately to the needs of personnel and the communities they serve.

Within the organisational structure of the Nigeria Police Force, Police Area Commands provide an important level of administrative and operational coordination between higher-level commands and police divisions. Their responsibilities require facilities capable of supporting activities such as administration, investigation, records management, communication, briefing, public interaction, logistics and staff welfare (Headley et al., 2021). The effectiveness of these activities is partly dependent on the adequacy, organisation and condition of the spaces provided. Facilities that are poorly planned, inadequately maintained or insufficient for their intended functions may constrain operational activities and affect the working environment of police personnel (Gholami & Abdulrauf, 2018).

The assessment of public facilities is important in determining whether existing buildings adequately support the activities for which they are intended. Building Performance Evaluation (BPE) provides a useful framework for examining buildings in actual use and determining the extent to which they satisfy functional, physical, environmental and user requirements. Building performance extends beyond the presence of required spaces to include their condition, usability, spatial organisation and environmental quality. Sotsek et al. (2019) identified a range of criteria used in Building Performance Evaluation, demonstrating the multidisciplinary

nature of assessing building performance. In Nigeria, Ibem et al. (2013) demonstrated the usefulness of performance evaluation in assessing public buildings through physical characteristics, functional attributes and users' satisfaction.

The application of building performance principles to Police Area Command facilities is particularly relevant because these facilities accommodate activities with different requirements for security, privacy, accessibility and operational interaction. Administrative offices, investigation areas, records spaces, public reception areas, communication facilities, briefing spaces and welfare provisions require appropriate spatial relationships and environmental conditions to function effectively (International Association of Chiefs of Police [IACP], 2021). Similarly, Yun and Lee (2021) assessment should extend beyond identifying the spaces available to examining their physical condition and functional adequacy. Such an approach provides an opportunity to identify deficiencies that may affect operational efficiency, user comfort, safety and the overall usability of the facilities .

Although building performance has received considerable attention within the built-environment literature, limited attention has been given to the systematic assessment of Police Area Command facilities in relation to their physical condition and functional adequacy. Existing research provides useful approaches for evaluating building performance, while research on police architecture

has highlighted the relevance of the physical environment to policing and public reassurance (Ekpo et.al., 2024). However, there remains a need for context-specific empirical evidence on the condition and functionality of Police Area Command facilities within the Nigerian built environment, particularly in Oyo State. This study therefore assesses selected Police Area Command facilities in Oyo State, Nigeria, focusing on their existing functional components, physical condition and functional adequacy, with the aim of identifying deficiencies and areas requiring improvement.

II. STUDY AREA

The study was conducted in Oyo State, Nigeria, one of the six states in Southwestern Nigeria, with Ibadan as its capital. The state lies approximately between latitudes 7°00' and 9°10'N and longitudes 2°50' and 4°30'E and comprises 33 Local Government Areas. Major urban centres include Ibadan, Oyo, Ogbomoso and Iseyin, with settlements ranging from highly urbanised to semi-urban and rural environments. Oyo State was selected because it contains several Police Area Commands serving diverse communities and operational jurisdictions. The variation in the location, scale and physical characteristics of these facilities provides a suitable basis for assessing their functional components, physical condition and functional adequacy.

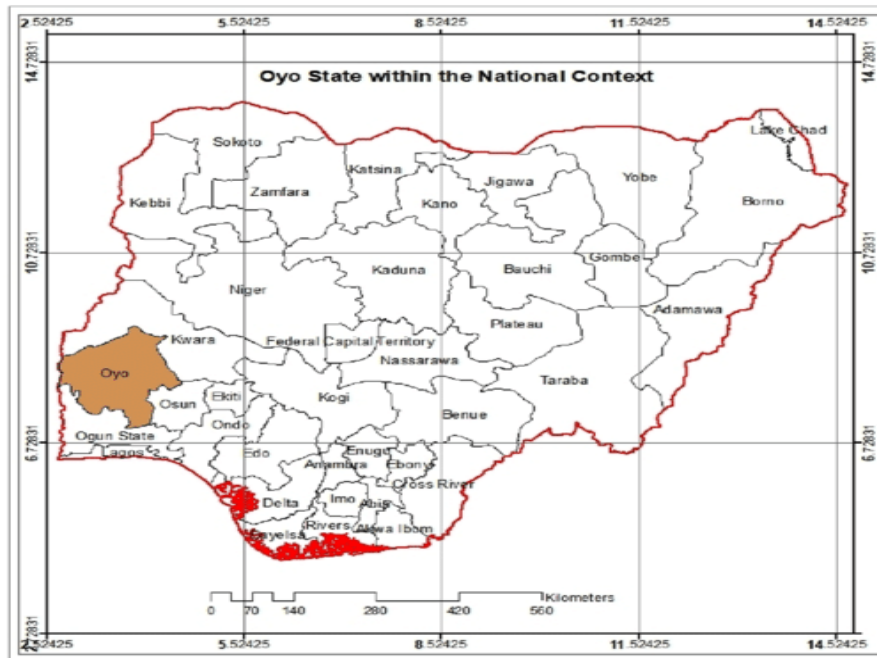


Figure 1.1: Oyo State within the context of Nigeria
Source: Falola and Agbola (2022)

III. LITERATURE REVIEW

Police facilities constitute an important component of the built environment supporting law enforcement administration and service delivery. Unlike conventional office buildings, police facilities accommodate a combination of administrative, operational, investigative, security and public-facing activities, requiring careful consideration of spatial organisation, accessibility, privacy and security. The physical environment in which policing takes place can influence operational efficiency, personnel welfare and the interaction between police institutions and the public. Millie (2012) argues that the architecture of police facilities has implications beyond functional accommodation, as the design and appearance of police buildings can influence public perceptions of safety, accessibility and reassurance. This establishes the built environment as an important consideration in the planning and assessment of police facilities.

Police Area Commands occupy an important position within the organisational structure of policing, functioning as administrative and operational centres

through which policing activities are coordinated across defined jurisdictions. Their activities typically involve administration, investigation, records management, communication, personnel supervision, logistics and interaction with the public. The range of activities undertaken within these facilities creates diverse spatial requirements, with some spaces requiring public accessibility while others require controlled access and enhanced security. Consequently, the effectiveness of an Area Command depends not only on the availability of accommodation but also on the appropriateness of its spatial arrangement and the relationship between its different functional components.

The concept of physical condition is central to the assessment of existing institutional facilities. Physical condition refers to the state and performance of building elements and associated services, including walls, roofs, floors, doors, windows, finishes, electrical installations, plumbing, drainage, ventilation and other supporting systems. The condition of these components determines, to a considerable extent, the safety, usability and serviceability of a facility. Deteriorated building

elements, inadequate maintenance and failing services can reduce the functional life of buildings and increase the difficulty of carrying out institutional activities effectively. Consequently, condition assessment provides an important basis for identifying defects, maintenance requirements and areas requiring intervention.

Beyond physical condition, the functionality of a building is determined by how effectively its spaces support the activities for which they are intended. Functional adequacy refers to the extent to which the size, arrangement, relationships and supporting facilities of spaces correspond with users' operational requirements. A building may remain physically sound while being functionally inadequate where spaces are insufficient, poorly located, overcrowded or poorly related to one another. In institutional facilities, appropriate circulation, zoning, accessibility and spatial relationships are therefore important considerations in determining functional performance. Ibem et al. (2013), in assessing public housing in Nigeria, demonstrated the importance of physical and functional attributes in understanding users' perceptions of building performance. This suggests that assessment of existing facilities should consider not only the physical state of buildings but also their ability to accommodate intended activities effectively.

Building Performance Evaluation (BPE) provides a broader approach for examining these relationships by assessing buildings in use against defined functional, technical, environmental and user requirements. Rather than evaluating a building solely on the basis of its original design intentions, BPE considers how the building performs in its actual context and how effectively it responds to the needs of its users. Sotsek et al. (2019) describe building performance evaluation as a multidisciplinary process involving different aspects of building performance and user requirements. The approach is therefore particularly relevant to existing police facilities, where differences between intended functions and actual use may emerge over time as operational requirements change, buildings deteriorate or spaces are adapted for activities for which they were not originally planned.

In Police Area Command facilities, the relationship between physical condition and functional adequacy is particularly important because policing activities require different levels of access, security, privacy and interaction. Police stations accommodate a range of functions whose spatial requirements and relationships can influence operational efficiency. Kamau (2025) found that deficiencies in spatial organisation, accessibility, public areas and the separation of detainee facilities can create constraints on police service delivery. Similarly, research on police spatial practices demonstrates that the use and organisation of space are closely connected to policing activities and institutional practices (Brauer et al., 2022). Consequently, assessment should extend beyond identifying whether particular spaces are available to examining their organisation, condition and suitability for the activities they support.

Environmental quality also contributes to the performance of institutional buildings. Factors such as lighting, ventilation, thermal conditions, acoustics and sanitation influence the conditions in which building users undertake their activities. In a recent Nigerian study of public office buildings, Etim et al. (2024) found variations in users' satisfaction with indoor environmental quality, demonstrating the relevance of environmental conditions to building performance and user experience. Research on Nigerian buildings similarly identifies environmental performance as an important consideration in improving the performance of existing building stock, particularly in response to energy challenges, climate change and changing user needs (Omoragbon et al., 2023). These findings suggest that the assessment of Police Area Command facilities should consider environmental conditions alongside physical and functional characteristics.

The planning of police facilities further requires a balance between security and accessibility. Police buildings must provide controlled environments for personnel, information, equipment and detainees while remaining accessible to members of the public seeking police services. This requirement has implications for entrances, circulation, spatial zoning and the relationship between public and restricted areas. Studies of police spatial organisation indicate

that the configuration and use of different spaces are connected to policing practices and the management of security-related activities (Brauer et al., 2022). Recent work on police-station redesign similarly emphasises accessibility, workflow, collaboration and appropriate separation of functional areas as important considerations for efficient service delivery (Kamau, 2025).

Despite growing interest in building performance and the spatial organisation of police facilities, there remains a need for context-specific empirical evidence on the existing condition and functional adequacy of Police Area Command facilities in Nigeria. Recent Nigerian research has examined aspects of building environmental performance and public-building user satisfaction (Etim et al., 2024), while police-facility studies have largely focused on spatial organisation, accessibility and service delivery in other contexts (Brauer et al., 2022). This leaves a need for empirical studies that bring these dimensions together within existing Police Area Command facilities in the Nigerian context. The present study addresses this gap by assessing selected Police Area Command facilities in Oyo State, Nigeria, with emphasis on their functional components, physical condition and functional adequacy.

IV. METHODOLOGY

The study adopted a descriptive research design using a mixed-method approach. Both primary and secondary data were utilised. Primary data were collected through structured questionnaires and direct observation of selected Police Area Command facilities, supported by photographs and measured drawings. Secondary data were obtained from relevant academic publications, official reports and institutional records on police infrastructure and building performance.

The study covered the seven functional Police Area Commands in Oyo State: Iyaganku, Ogbomoso, Oyo, Saki, Iseyin, Eruwa and Moniya. Total enumeration was adopted for the selection of the Area Commands, while police personnel constituted the study population. Administrative records indicated an estimated combined personnel strength of 1,820 across the seven commands. A sample size of 328 respondents was determined using Slovin's formula at a 5% margin of error and proportionately distributed according to the staff strength of each Area Command. Respondents were subsequently selected through random sampling. The questionnaire obtained information on the functional components and adequacy of the facilities, while the observation checklist was used to assess their physical condition, including building materials, accessibility, lighting, ventilation and maintenance.

Data were coded and analysed using SPSS version 26 and Microsoft Excel. Descriptive statistics, including frequencies, percentages, means and standard deviations, were used to summarise the respondents' assessments and the condition, functionality and adequacy of the facilities. Observational data were analysed through content-based interpretation, while tables and charts were used to compare the selected Area Commands.

V. FINDINGS AND RESULTS

Existing Facilities and Core Functional Components

The assessment revealed variations in the availability of functional facilities across the selected Police Area Commands in Oyo State (Table 1). Administrative offices recorded the highest availability, with 94.5% of respondents reporting their presence (MWV = 1.94; AWV = 0.97), followed by staff offices at 93.2% (AWV = 0.96). Investigation rooms and detention cells were also widely available, with AWVs of 0.95 and 0.94, respectively.

Table 1: Availability of Existing Facilities and Functional Components in Selected Police Area Commands in Oyo State (N = 309)

Rank	Facility	Available No. (%)	Not Available No. (%)	TWV	MWV	AWV
1st	Administrative offices	292 (94.5)	17 (5.5)	601	1.94	0.97
2nd	Staff offices	288 (93.2)	21 (6.8)	597	1.93	0.96
3rd	Investigation rooms	276 (89.3)	33 (10.7)	585	1.89	0.95
4th	Detention cells	271 (87.7)	38 (12.3)	580	1.88	0.94
5th	Interrogation rooms	259 (83.8)	50 (16.2)	568	1.84	0.92
6th	Communication/control room	252 (81.6)	57 (18.4)	561	1.82	0.91
7th	Armoury	248 (80.3)	61 (19.7)	557	1.80	0.90
8th	Meeting/conference rooms	241 (78.0)	68 (22.0)	550	1.78	0.89
9th	Sanitary facilities (toilets)	236 (76.4)	73 (23.6)	545	1.76	0.88
10th	Public complaint desk	231 (74.8)	78 (25.2)	540	1.75	0.87
11th	Vehicle parking spaces	225 (72.8)	84 (27.2)	534	1.73	0.86
12th	Barracks/accommodation	193 (62.5)	116 (37.5)	502	1.62	0.81
13th	Evidence storage rooms	182 (58.9)	127 (41.1)	491	1.59	0.79
14th	Resting/relaxation areas	158 (51.1)	151 (48.9)	467	1.51	0.76
15th	Medical/first aid unit	141 (45.6)	168 (54.4)	450	1.46	0.73

Other core operational facilities, including interrogation rooms, communication/control rooms and armouries, recorded relatively high availability, with AWWs ranging from 0.90 to 0.92. Meeting/conference rooms, sanitary facilities and public complaint desks recorded moderate availability, with AWWs of 0.89, 0.88 and 0.87, respectively. Lower availability was recorded for vehicle parking spaces (AWV = 0.86), staff accommodation (0.81) and evidence storage rooms (0.79). The least available facilities were resting/relaxation areas (0.76) and medical/first aid units (0.73). The latter also recorded the lowest MWV of 1.46.

Overall, the findings indicate that facilities supporting core administrative and operational

activities were more readily available than welfare and support facilities. Administrative offices, staff offices, investigation rooms and detention cells were the most consistently provided, whereas medical/first aid units, relaxation areas, accommodation and evidence storage showed greater deficiencies. This indicates an uneven pattern of facility provision across the selected Police Area Commands.

ii. Physical Condition of Existing Facilities

The physical condition of the selected Police Area Command facilities was assessed using a five-point Likert scale ranging from 1 (Very Poor) to 5 (Very Good). The results were analysed using Mean Score (MS), Relative Condition Index (RCI), Standard Deviation (SD) and ranking, with higher RCI values indicating better physical condition.

Table 2: Physical Condition of Existing Facilities in Selected Police Area Commands (N = 309)

Rank	Facility Condition	VP (1)	P (2)	F (3)	G (4)	VG (5)	Mean Score	RCI	SD
1st	Ventilation	17	42	79	108	63	3.51	0.70	1.09
2nd	Building structural condition	18	44	87	103	57	3.44	0.69	1.12
3rd	Lighting quality	21	49	84	97	58	3.39	0.68	1.11

Rank	Facility Condition	VP (1)	P (2)	F (3)	G (4)	VG (5)	Mean Score	RCI	SD
4th	Roof condition	26	61	95	86	41	3.18	0.64	1.18
5th	Furniture condition	28	63	96	81	41	3.14	0.63	1.16
6th	Floor finishes	31	66	101	74	37	3.06	0.61	1.17
7th	Wall finishes	39	74	92	71	33	2.95	0.59	1.21
8th	Sanitary facilities	47	82	93	59	28	2.80	0.56	1.22
9th	Water supply	52	88	91	54	24	2.71	0.54	1.24
10th	Maintenance level	66	94	78	49	22	2.57	0.51	1.29

Findings

The results in Table 2 indicate variations in the physical condition of the assessed Police Area Command facilities. Ventilation ranked first, with a Mean Score of 3.51 and an RCI of 0.70, followed by building structural condition (MS = 3.44; RCI = 0.69) and lighting quality (MS = 3.39; RCI = 0.68). These results indicate that ventilation, structural condition and lighting were the relatively better-performing physical components across the selected facilities.

Roof condition ranked fourth (MS = 3.18; RCI = 0.64), while furniture condition ranked fifth (MS = 3.14; RCI = 0.63). Floor finishes and wall finishes followed with RCI values of 0.61 and 0.59, respectively, indicating comparatively moderate conditions. Lower ratings were recorded for sanitary facilities (MS = 2.80; RCI = 0.56) and water supply (MS = 2.71; RCI = 0.54). Maintenance level recorded the lowest rating, with a Mean Score of 2.57 and RCI of 0.51. This suggests that maintenance was the weakest aspect of physical facility performance among the assessed Police Area Commands.

Overall, the findings indicate that basic building and environmental components performed relatively better than service and maintenance components. Ventilation, structural condition and lighting recorded the highest RCI values, whereas maintenance, water supply and sanitary facilities recorded the lowest. The results therefore point to a pattern in which the basic building fabric remains relatively functional, but facility services and maintenance require greater attention.

iii. Functionality and Adequacy of Existing Facilities
The findings show that the selected Police Area Command facilities were moderately functional, with CPI values ranging from 0.52 to 0.67, as indicated in Table 4.6. None of the assessed components reached the highly functional/adequate threshold of 0.80. Offices for daily operations and security features recorded the highest CPI of 0.67, followed by service delivery and access control at 0.66, indicating relatively satisfactory performance of core operational and security functions.

Table iii: Composite Functional Performance Evaluation of Police Area Command Facilities (N = 309)

S/N	Facility Statement	SD	D	N	A	SA	FEQ	APR	CPI	Performance Level	Rank
1	Offices are useful for daily operations	24	48	81	104	52	3.36	67.2	0.67	Moderately Functional	1st
2	Security features are provided	27	49	79	103	51	3.33	66.6	0.67	Moderately Functional	2nd
3	The facility supports effective service delivery	25	52	82	101	49	3.31	66.2	0.66	Moderately Functional	3rd
4	Security features effectively control access	29	53	78	101	48	3.28	65.6	0.66	Moderately Functional	4th
5	Office spaces are well-organized for efficient workflow	31	56	75	97	50	3.26	65.2	0.65	Moderately Functional	5th

S/N	Facility Statement	SD	D	N	A	SA	FEQ	APR	CPI	Performance Level	Rank
6	Communication facilities are efficient	32	58	71	101	47	3.24	64.8	0.65	Moderately Functional	6th
7	Communication systems function effectively during operations	30	59	76	95	49	3.24	64.8	0.65	Moderately Functional	7th
8	The facility layout supports efficient policing activities	29	61	76	96	47	3.23	64.6	0.65	Moderately Functional	8th
9	The layout supports smooth movement within the facility	34	63	73	93	46	3.17	63.4	0.63	Moderately Functional	9th
10	The facility design enhances operational efficiency	36	67	79	83	44	3.10	62.0	0.62	Moderately Functional	10th
11	Detention cells can contain suspects	46	77	84	69	33	2.89	57.8	0.58	Poorly Functional	11th
12	Detention cells allow effective monitoring and control	48	79	82	67	33	2.86	57.2	0.57	Poorly Functional	12th
13	Parking spaces are efficient	53	88	73	64	31	2.78	55.6	0.56	Poorly Functional	13th
14	Parking layout allows easy movement of vehicles	57	82	74	66	30	2.77	55.4	0.55	Poorly Functional	14th
15	Staff welfare facilities are adequate	66	91	69	57	26	2.63	52.6	0.53	Poorly Functional	15th
16	Welfare facilities are convenient and comfortable to use	72	87	71	53	26	2.59	51.8	0.52	Poorly Functional	16th

Communication facilities, office organisation and facility layout recorded CPI values of 0.65, while internal movement and overall design efficiency recorded 0.63 and 0.62, respectively. These results indicate moderate functionality but also reveal limitations in spatial organisation, circulation and workflow. Lower performance was observed in detention facilities, with CPI values of 0.58 and 0.57 for containment and monitoring. Parking facilities also performed poorly, recording 0.56 for efficiency and 0.55 for vehicular movement. The lowest ratings were recorded for staff welfare facilities, with CPI values of 0.53 for adequacy and 0.52 for comfort and convenience.

Overall, the findings reveal a clear gap between operational/security functions and support facilities, with welfare, detention and parking provisions requiring greater attention. The results therefore support targeted facility upgrading, improved spatial planning, circulation and enhanced staff welfare provision to improve the overall functionality and adequacy of Police Area Commands in Oyo State.

VI. CONCLUSION AND RECOMMENDATIONS

The findings revealed that the selected Police Area Commands in Oyo State were moderately functional, with CPI values ranging from 0.52 to 0.67. Offices, security features, communication facilities and service-delivery functions performed relatively well, while detention, parking and staff welfare facilities recorded lower functional ratings. The physical condition assessment similarly showed that ventilation, structural condition and lighting were relatively satisfactory, whereas water supply, sanitary facilities and maintenance were comparatively poor.

Overall, the results indicate that existing Police Area Commands adequately support core policing activities but remain constrained by inadequate welfare provision, poor maintenance, limited parking and detention-related deficiencies. These limitations may reduce operational efficiency, staff comfort and the long-term performance of the facilities. It is therefore recommended that priority be given to the rehabilitation and upgrading of poorly performing

facilities, particularly detention spaces, parking areas, welfare facilities, water and sanitary services. Spatial layouts should be reorganised to improve circulation, workflow, security and operational efficiency, while adequate relaxation and welfare spaces should be incorporated to support personnel well-being. A preventive maintenance programme and periodic facility-condition assessment should also be established to minimise deterioration and sustain the functional performance of Police Area Commands in Oyo State.

Note :The authors declare no conflicts of interest

REFERENCES

- [1] Brauer, E., Dangelmaier, T., & Hunold, D. (2022). "Police spatial knowledge" – Aspects of spatial constitutions by the police. *Journal of Organizational Ethnography*, 11(2), 147–161. [Crossref](#)
- [2] Ekpo, E., Adelakun, G. I., Daukere, B. E., & Ademola, A. J. (2024). Geospatial assessment of police installation locations in Oyo Town, Oyo State, Nigeria. *Sokoto Journal of Geographical Studies*, 1, 182–194.
- [3] Etim, E. M., Mbina, A. A., Udoh, P. U., et al. (2024). An assessment of end user satisfaction with indoor environmental quality in public office buildings in Akwa Ibom State.
- [4] Falola, O. and Agbola, S. (2022). Institutional Capacity and the Roles of Key Actors in Fire Disaster Risk Reduction: The Case of Ibadan, Nigeria. *International Journal of Disaster Risk Science*. 13. [Crossref](#)
- [5] Gholami, H., & Abdulrauf, S. H. (2018). Inside the Nigeria Police Force: An examination of the condition and facilities at the police stations in Ilorin Metropolis of Kwara State, Nigeria. *SSRN*. <https://doi.org/10.2139/ssrn.3109768>.
- [6] Headley, A. M., Blount-Hill, K.-L., & St. John, V. J. (2021). The psychology of justice buildings: A survey experiment on police architecture, public sentiment, and race. *Journal of Criminal Justice*, 73, 101747. [Crossref](#)
- [7] Ibem, E. O., Opoko, A. P., Adeboye, A. B., & Amole, D. (2013). Performance evaluation of residential buildings in public housing estates in Ogun State, Nigeria: Users' satisfaction perspective. *Frontiers of Architectural Research*, 2(2), 178–190. [Crossref](#)
- [8] International Association of Chiefs of Police. (2021). Planning, designing, and constructing police facilities. *International Association of Chiefs of Police*.
- [9] Kamau, G. N. (2025). Spatial redesign of police stations in urban areas for efficient service delivery. *SABS Journal of Environment, Space and Society*.
- [10] Millie, A. (2012). Police stations, architecture and public reassurance. *The British Journal of Criminology*, 52(6), 1092–1112. [Crossref](#)
- [11] Omoragbon, O. M., Al-Maiyah, S., & Coates, P. (2023). A survey of environmental performance enhancement strategies and building data capturing techniques in the Nigerian context. *Buildings*, 13(2), 452. [Crossref](#)
- [12] Sotsek, N. C., Leitner, D. S., & Lacerda Santos, A. P. (2019). A systematic review of Building Performance Evaluation criteria. *Revista ALCONPAT*, 9(1), 1–14. [Crossref](#)
- [13] St. John, V. J., Headley, A. M., & Blount-Hill, K.-L. (2023). Police station design and intrusive police encounters: Untangling variations in emotions and behaviourally-relevant perceptions across racial groups. *Policing and Society*, 33(9–10), 1066–1095. [Crossref](#)
- [14] Tanko, A. A., & Umar, B. (2021). Police treatment of the public in police stations: Evidence from Zaria, Nigeria. *Policing: A Journal of Policy and Practice*, 15(3), 1854–1866. [Crossref](#)
- [15] Yun, C.-S., & Lee, K.-H. (2021). Planning of the circulation and zoning of spatial functions by police building level. *Journal of the Regional Association of Architectural Institute of Korea*, 23(6), 23–31.