

# Law Enforcement Against Spatial Planning Violations in Housing Development: Challenges, Governance, and Regulatory Compliance

Arie Sigit<sup>1\*</sup>, Nur Handayati<sup>2</sup>, Fitri Ayuningtyas<sup>3</sup>, Vieta Imelda Cornelis<sup>4</sup>

Universitas Dr. Soetomo, Surabaya, Indonesia<sup>1,2,3,4</sup>

[ariesigit08@gmail.com](mailto:ariesigit08@gmail.com)<sup>1\*</sup>, [nur.handayati@unitomo.ac.id](mailto:nur.handayati@unitomo.ac.id)<sup>2</sup>, [fitri.ningtyas69@gmail.com](mailto:fitri.ningtyas69@gmail.com)<sup>3</sup>, [vieta@unitomo.ac.id](mailto:vieta@unitomo.ac.id)<sup>4</sup>



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## Abstract

**Purpose:** This study aims to analyze the implementation of law enforcement against spatial planning violations in housing development, identify the factors affecting its effectiveness, and examine strategies to strengthen legal compliance in sustainable housing development.

**Research Methodology:** This study employed a qualitative method using an empirical juridical approach. Data were collected through in-depth interviews, document analysis, observation, and literature review. The data were analyzed using the interactive model of Miles, Huberman, and Saldaña, including data reduction, data display, and conclusion drawing, with source and method triangulation to ensure credibility.

**Results:** The findings indicate that law enforcement against spatial planning violations has not been fully effective due to weak institutional coordination, limited supervision, inadequate integration of spatial data, and inconsistent implementation of legal sanctions. Administrative sanctions remain the dominant enforcement mechanism, while preventive monitoring and public participation require significant improvement.

**Conclusions:** Effective law enforcement requires integrated governance, stronger institutional capacity, consistent supervision, updated spatial planning instruments, and active collaboration among government agencies, law enforcement institutions, and developers.

**Limitations:** This study is limited to a qualitative analysis of housing development cases and does not include comparative regional analysis or quantitative measurement of law enforcement effectiveness.

**Contributions:** This study contributes to the development of spatial planning law by providing practical recommendations for strengthening law enforcement, improving spatial governance, and supporting sustainable housing development policies in Indonesia.

**Keywords:** *Housing Development, Law Enforcement, Legal Effectiveness, Spatial Planning, Spatial Planning Violations*

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## 1. Introduction

Housing development projects serve not only as drivers of regional economic growth but also as important instruments for fulfilling the fundamental right to adequate housing as recognized under international human rights frameworks. However, over the past three years (2023 to 2025), housing development in many regions has progressed more rapidly than the capacity of spatial planning control mechanisms. This imbalance is particularly evident in areas where Detailed Spatial Plans have not yet been fully implemented, monitoring capacity remains limited, and increasing land market pressures encourage accelerated land conversion. Studies confirm that residential expansion in peri-urban areas frequently triggers land-use conversion and spatial restructuring that are not always aligned with officially designated spatial plans, thereby increasing the potential for social conflicts and environmental risks ([Yusran, Zanuardi, & Woltjer, 2022](#); [Aguilar, & Ward, 2003](#)).

In the housing sector, spatial planning violations commonly occur through development activities undertaken in zones not designated for residential purposes, the occupation of riverbanks and drainage corridors, encroachment upon protected local conservation areas, or construction in disaster-prone locations that exacerbate vulnerability to flooding and landslides ([Han & Lai, 2022](#)). Over the last three years, issues related to housing development projects have increasingly become intertwined with legal disputes and litigation. A recurring pattern can be observed: affected communities submit objections and complaints, government authorities initiate enforcement measures, and these situations subsequently evolve into administrative or civil disputes, and occasionally criminal proceedings where allegations of abuse of authority, corruption, or gratification in licensing processes arise.

Administrative law scholars have emphasized that spatial planning conflicts generally originate from two primary sources: procedural defects, including inadequate transparency, limited public participation, deficiencies in Environmental Impact Assessments or other environmental review requirements, and insufficient access to information; and substantive defects, including inconsistencies with spatial plans, violations of setback requirements, and contradictory technical recommendations. These deficiencies ultimately affect the legality of governmental decisions ([Tan, & Zhao, 2022](#); [Musakwa, & Van, 2013](#)). In practice, when spatial conformity decisions or permits are issued without a strong planning foundation, the likelihood of disputes before administrative tribunals increases significantly, as judicial review of administrative actions relies heavily on the principles of legal certainty, due diligence, and the prohibition of abuse of power.

Recent reforms introducing risk-based licensing systems and the digitalization of public services have created opportunities for improving governance while simultaneously generating new challenges. Several studies have noted that the integration of licensing processes through digital systems can enhance administrative efficiency ([Gil-Garcia, Pardo, & Nam, 2014](#); [Verdegem, & Verleye, 2009](#)). However, effectiveness remains highly dependent on the quality of planning data, the availability of detailed spatial plans, the readiness of spatial control authorities, and the consistency of field verification procedures ([Yeh & Li, 2001](#)). Within housing development projects, regulatory gaps often emerge when spatial conformity documents are treated merely as administrative formalities, while oversight of construction activities and post-licensing land utilization remains weak. Such deviations frequently generate externalities affecting surrounding communities and urban infrastructure ([Bengston, Fletcher, & Nelson, 2004](#)).

At the same time, spatial planning law enforcement should not be viewed solely as the imposition of sanctions. Rather, it encompasses a comprehensive cycle of prevention, monitoring, enforcement, and restoration. Recent governance studies emphasize that effective enforcement requires strong cross-sectoral coordination among spatial planning, land administration, environmental management, housing authorities, and public works institutions, as well as clear delineation of authority between central and local governments and consistent standards for proving violations ([Ansell, & Gash, 2008](#); [Fung, 2006](#)). Without these elements, administrative sanctions may fail to create meaningful deterrent effects, particularly when developers perceive penalties as manageable business costs. Moreover,

restoration measures such as the rehabilitation of protected setback areas, drainage normalization, or relocation of non-compliant structures often remain inadequately implemented ([Tarlock, 2002](#)).

Other studies further highlight the importance of procedural and distributive justice, as communities bearing the consequences of spatial planning violations are frequently placed in weaker positions with respect to access to information and evidentiary resources ([Schlosberg, 2007](#); [Holland, Sangster, & Weimer, 2021](#)). Against this background, research on law enforcement in cases of spatial planning violations associated with housing development has become increasingly important. Such research addresses a dual need: first, to protect spatial functions and public safety; and second, to provide legal certainty for housing investments that comply with planning regulations ([Owens & Cowell, 2011](#)).

This study approaches spatial planning violations not merely as instances of permit non-compliance but as broader governance issues involving regulatory design, the quality of administrative decision-making, the effectiveness of monitoring systems, the enforceability of sanctions, and the dispute-resolution mechanisms employed when conflicts arise. The objective of this study is to provide a comprehensive understanding of how legal enforcement operates or fails to operate in situations involving spatial planning violations within housing development projects. Specifically, the research seeks to identify and explain the most common forms of spatial planning violations that have emerged in housing development activities in recent years and to examine the factors contributing to such violations. These factors include normative aspects, such as compliance with spatial plans, zoning regulations, and setback requirements; administrative aspects, including licensing procedures and documentation requirements; and institutional aspects, such as supervisory capacity and inter-agency coordination ([Fainstein, 2010](#); [Talen, 2012](#)).

Furthermore, this study aims to analyze the legal enforcement mechanisms employed in addressing spatial planning violations, including administrative sanctions, dispute resolution through administrative courts, and the potential application of other legal instruments where violations result in significant harm or involve intentional misconduct. The analysis evaluates enforcement effectiveness not only in terms of halting unlawful activities but also in relation to restoring spatial functions, preventing secondary impacts such as flooding and traffic congestion, and ensuring legal certainty for both affected communities and law-abiding developers ([Ostrom, 1990](#); [Healey, 2006](#)). Ultimately, this study seeks to formulate practical recommendations for strengthening spatial planning law enforcement in housing development. These recommendations are expected to address all stages of the regulatory cycle, including prevention through improved planning accuracy and information transparency, enhanced monitoring through field inspections and reporting systems, stronger enforcement through consistent sanctions and evidentiary standards, and effective restoration measures through rehabilitation, demolition, or spatial reorganization.

## **2. Literature Review**

### ***2.1 Law Enforcement***

Law enforcement refers to the process of implementing legal norms to achieve legal certainty, justice, and social welfare within society. In the context of spatial planning, law enforcement serves not only as a repressive mechanism for addressing violations but also as a preventive instrument designed to ensure that every form of land utilization complies with officially approved spatial plans ([Needham, 2006](#); [Alexander, 2001](#)). Accordingly, effective law enforcement plays a central role in maintaining orderly spatial development, protecting environmental sustainability, and balancing public and private interests in land use.

The effectiveness of spatial planning law enforcement is determined by several interrelated factors, including the quality of legal regulations, the competence of law enforcement agencies, the availability of supporting facilities and infrastructure, the level of public compliance, and the prevailing legal culture within society ([Soekanto, 2019](#)). These studies further highlight that inadequate coordination among government institutions remains one of the principal obstacles to

effective spatial planning control, often resulting in overlapping responsibilities, inconsistent enforcement, and weak regulatory oversight ([Ansell, & Gash, 2008](#); [Emerson, Nabatchi, & Balogh, 2012](#)).

The enforcement of spatial planning regulations continues to face significant challenges, particularly due to the inconsistent application of both administrative and criminal sanctions. Numerous violations receive limited or delayed enforcement responses, creating the perception among developers that non-compliance represents an acceptable business risk rather than a serious legal offense ([Buitelaar, 2003](#)). Such conditions substantially weaken the deterrent effect of the legal system, diminish public confidence in regulatory institutions, and contribute to increasing conflicts over land use. Scholars of comparative urban governance observe that regulatory credibility is inseparable from the consistent and predictable application of enforcement mechanisms ([Booth, 2007](#); [Waterhout, Othengrafen, & Sykes, 2013](#)).

Spatial planning law enforcement should be viewed as an integral component of environmental protection because every unauthorized land-use activity has the potential to generate ecological degradation ([Bengston, Fletcher, & Nelson, 2004](#); [Musakwa, & Van, 2013](#)). Consequently, enforcement policies should adopt an integrated approach that combines administrative law, environmental law, and spatial planning regulations to promote sustainable development while ensuring the protection of ecological functions and public interests ([Tarlock, 2002](#); [Alterman, 2010](#)).

## **2.2 Effectiveness of Law Enforcement**

The effectiveness of law enforcement reflects the extent to which the legal system successfully achieves its intended objectives. From the perspective of administrative law, effectiveness cannot be measured solely by the number of sanctions imposed but must also be evaluated according to the government's ability to prevent spatial planning violations before they occur. Preventive enforcement is therefore considered equally important as corrective enforcement, particularly in managing rapidly expanding urban development ([Brueckner, 2000](#); [Angel, Sheppard, & Civco, 2005](#)).

Drawing upon legal effectiveness frameworks, scholars explain that the effectiveness of spatial planning law enforcement is influenced by five fundamental factors: the quality of legal rules, the capability of law enforcement officials, the adequacy of facilities and infrastructure, community participation and compliance, and the prevailing legal culture ([Soekanto, 2019](#); [Tyler, 2006](#)). These five dimensions operate interactively, meaning that weaknesses in one component may significantly reduce the overall performance of the enforcement system. Empirical studies from various national contexts confirm that the most effective enforcement regimes combine clear statutory provisions with well-resourced regulatory agencies that maintain strong working relationships with local communities ([Fischel, 2004](#); [Cullingworth, & Caves, 2009](#)).

Effective control of housing development largely depends on the quality of regional planning. Spatial planning that is not supported by accurate and up-to-date geospatial information frequently results in licensing decisions that fail to regulate urban expansion effectively ([Yeh, & Li, 2001](#); [Geertman, & Stillwell, 2004](#)). Consequently, deficiencies in spatial planning data increase the likelihood of unauthorized developments and weaken the government's ability to maintain orderly land use. Research conducted in rapidly urbanizing countries demonstrates that this problem is often exacerbated by the lag between population growth and the revision of spatial planning documents ([United, 2022](#); [Angel et al., 2005](#)).

The effectiveness of law enforcement is highly dependent upon the consistent application of legal sanctions. When authorities fail to impose sanctions firmly and consistently, violators are unlikely to experience meaningful deterrence, allowing unlawful practices to continue and even become normalized ([Ayres & Braithwaite, 1992](#)). Therefore, the success of law enforcement should ultimately be assessed not only by the quantity of enforcement actions undertaken but also by their capacity to influence behavioral change among individuals, developers, and other stakeholders. Responsive regulation theory suggests that enforcement frameworks achieve greater long-term compliance when

they combine persuasion and monitoring with credible escalation to formal sanctions ([Baldwin, Cave, & Lodge, 2012](#)).

### **2.3 Spatial Planning Violations**

Spatial planning violations refer to any form of land utilization or development activity that is inconsistent with officially approved spatial plans or applicable licensing requirements. Such violations may include construction within protected areas, river buffer zones, designated green open spaces, or developments that fail to comply with approved building permits and technical planning requirements ([Webster & Lai, 2003](#)). These unlawful activities not only undermine spatial planning objectives but also threaten environmental sustainability, public safety, and long-term urban resilience ([Calthorpe & Fulton, 2001](#)).

Spatial planning violations generate consequences that extend beyond environmental degradation. They also reduce legal certainty, increase disputes among communities, government authorities, and private developers, and weaken public confidence in the spatial planning system ([Glaeser & Gyourko, 2018](#)). Consequently, effective prevention and enforcement are essential to preserving both environmental integrity and legal order. Comparative research across developing and developed countries consistently finds that the incidence of spatial planning violations is inversely related to the strength of monitoring and enforcement systems ([Kim, 2011](#); [Alterman, 2001](#)).

Inadequate governmental supervision remains one of the primary reasons why many spatial planning violations persist without timely intervention. As a result, violations that initially constitute administrative non-compliance often evolve into complex legal disputes involving civil litigation, administrative proceedings, or even criminal investigations ([Lascoumes & Le, 2007](#)). This development illustrates that effective monitoring constitutes an indispensable element of spatial planning governance and cannot be separated from the broader law enforcement framework. Studies on regulatory compliance further demonstrate that the probability of detection is often a more powerful deterrent than the severity of sanctions ([May, 2004](#)).

Spatial planning violations in urban housing developments are predominantly associated with construction activities that conflict with officially approved spatial plans, the conversion of designated green open spaces, and development undertaken without approved building permits ([Han & Lai, 2022](#)). Research emphasizes that stronger interagency coordination, systematic monitoring, and consistent enforcement represent essential prerequisites for reducing the incidence of spatial planning violations. International experience demonstrates that the introduction of Geographic Information System technologies and remote sensing tools has substantially improved the capacity of planning authorities to detect violations at earlier stages ([Geertman, & Stillwell, 2004](#); [Peng, 2001](#)).

### **2.4 Housing Development**

Housing development represents one of the most strategic sectors in national and regional development because it not only fulfills the growing demand for adequate housing but also contributes significantly to economic growth, employment generation, and urban expansion ([Ruming, 2014](#); [Gurran, & Phibbs, 2013](#)). Nevertheless, the rapid pace of residential development is frequently not accompanied by adequate compliance with spatial planning regulations, resulting in various legal, environmental, and governance challenges. International research confirms that housing development pressures are particularly acute in rapidly urbanizing regions of the Global South, where institutional capacity for planning regulation is often weaker than demand growth ([United, 2022](#); [Cohen, 2006](#)).

The effectiveness of housing development is closely associated with the quality of regional planning, the integration of reliable geospatial information, and the consistency of spatial planning control mechanisms ([Fischel, 2004](#); [Yeh, & Li, 2001](#)). Housing projects implemented without accurate planning data or effective regulatory oversight are more likely to generate land-use conflicts, inefficient infrastructure provision, and long-term environmental degradation. Studies of informal

settlement regularization processes similarly demonstrate that the long-term costs of inadequate planning enforcement far outweigh the short-term administrative savings associated with tolerating violations ([Turner, 1976](#); [Payne, 2002](#)).

Housing developments that disregard environmental considerations have the potential to damage ecosystems, increase flood vulnerability, and reduce the overall quality of residential environments ([Han, & Lai, 2022](#); [Bengston, Fletcher, & Nelson, 2004](#)). Consequently, development control should be implemented throughout the entire project cycle, beginning with spatial planning and licensing procedures and continuing through construction supervision and post-development monitoring. Such an integrated approach is essential for ensuring that housing development remains consistent with the principles of sustainable development as articulated in international frameworks including the United Nations Sustainable Development Goals ([United, 2015](#)).

Housing development should incorporate disaster risk reduction strategies, land consolidation policies, and environmental sustainability considerations into every stage of project planning and implementation ([Wisner, Blaikie, Cannon, & Davis, 2004](#)). Residential developments that ignore fundamental spatial planning principles significantly increase the vulnerability of urban areas to natural hazards while simultaneously creating conditions that are likely to trigger legal disputes in the future. Therefore, integrating spatial planning compliance into housing development policies is indispensable for achieving sustainable, resilient, and legally secure urban growth ([Cutter, Barnes, Berry, Burton, Evans, Tate, & Webb, 2008](#); [Talen, 2012](#)). The alignment of housing development with spatial planning frameworks is recognized as a key governance challenge across both developed and developing economies, requiring adaptive institutional arrangements and sustained political commitment to regulatory consistency ([Healey, 2006](#); [Fainstein, 2010](#)).

### **3. Research Methodology**

This study adopts a qualitative research design employing an empirical juridical approach to examine the enforcement of law against spatial planning violations in housing development. A qualitative approach was selected because the study seeks to develop an in-depth understanding of how spatial planning regulations are implemented in practice while identifying the factors that influence the effectiveness of legal enforcement. The empirical juridical approach enables the research to move beyond a normative examination of statutory provisions by investigating how these legal norms are interpreted, implemented, and enforced by relevant stakeholders ([Creswell, 2014](#)). Accordingly, the analysis encompasses not only the applicable legal framework but also its practical implementation by law enforcement authorities, local governments, housing developers, and communities directly affected by spatial planning violations. This approach allows the study to identify and explain the gap between *das sollen* (the law as it ought to be) and *das sein* (the law as it operates in practice) within the governance of spatial planning.

The study utilizes both primary and secondary sources of data. Primary data were collected through in-depth interviews with purposively selected informants representing institutions and stakeholders directly involved in spatial planning and housing development. These informants included officials from government agencies responsible for spatial planning, licensing, housing, and public works, law enforcement officers, academics specializing in spatial planning and administrative law, legal practitioners, housing developers, and members of communities affected by spatial planning violations. Secondary data were obtained through an extensive review of relevant legal instruments and documentary sources, including statutory regulations, judicial decisions, spatial planning documents such as Regional Spatial Plans and Detailed Spatial Plans, government reports, scholarly books, and peer-reviewed national and international journal articles addressing law enforcement, spatial planning governance, and housing development ([Bryman, 2016](#)). To ensure a comprehensive understanding of the research problem, data were collected through a combination of observation, in-depth interviews, document analysis, and literature review.

Data analysis followed the interactive analytical framework developed by [Miles, Huberman, and Saldana \(2014\)](#), which consists of four interrelated stages: data collection, data condensation, data

display, and conclusion drawing and verification. The analysis focused on identifying the prevailing forms of spatial planning violations in housing development, evaluating the effectiveness of legal enforcement mechanisms implemented by government institutions and law enforcement agencies, examining the factors that facilitate or hinder effective enforcement, and exploring strategies for strengthening compliance with spatial planning regulations ([Yin, 2018](#)). To enhance the validity, credibility, and trustworthiness of the findings, the study employed source triangulation, methodological triangulation, and document triangulation by systematically comparing interview data with legal documents, government policies, and findings from previous studies ([Lincoln & Guba, 1985](#)). The results were subsequently interpreted using the theory of legal effectiveness together with the governance framework of spatial planning, providing the analytical foundation for formulating practical recommendations aimed at strengthening the legal enforcement system against spatial planning violations in housing development.

## 4. Results and Discussions

### 4.1 Result

The findings indicate that the enforcement of spatial planning law in housing development has not yet achieved its intended level of effectiveness, despite the existence of a relatively comprehensive legal and regulatory framework. The analysis of spatial planning policy implementation reveals that most violations arise from housing developments that fail to comply fully with the Regional Spatial Plan and the Detailed Spatial Plan. As discussed in the introduction, this situation is largely driven by the increasing demand for housing, which has not been accompanied by equally effective mechanisms for controlling land use. The study further identifies cases in which housing developers modified approved site plans, constructed residential projects within environmentally protected zones, or expanded developments beyond the scope of permits issued by local authorities. These findings are consistent with international evidence demonstrating that rapid urbanization frequently outpaces regulatory capacity in both developed and developing contexts ([Angel, Sheppard, & Civco, 2005](#); [Cohen, 2006](#)).

The study also demonstrates that the effectiveness of law enforcement is strongly influenced by the institutional capacity of local governments to perform supervisory and spatial control functions. Although the implementation of digital licensing systems has simplified procedures and improved administrative efficiency, field supervision of housing developments remains inadequate. Limited human resources, insufficient integration of geospatial information, and weak coordination among agencies responsible for spatial planning, licensing, public works, environmental management, and law enforcement have prevented many violations from being detected at an early stage ([Geertman, & Stillwell, 2004](#); [Gil-Garcia, Pardo, & Nam, 2014](#)). Consequently, enforcement measures are often initiated only after construction activities have progressed significantly or following complaints submitted by affected communities. This reactive rather than proactive enforcement posture reflects broader institutional challenges documented in comparative studies of planning enforcement across developing economies ([Kim, 2011](#); [Lascoumes, & Le, 2007](#)).

Furthermore, the findings reveal that enforcement actions continue to rely predominantly on administrative sanctions, including written warnings, temporary suspension of construction activities, and orders requiring developers to adjust their projects in accordance with applicable spatial planning regulations. By contrast, criminal prosecution and civil litigation are rarely pursued because they require more complex evidentiary processes and stronger coordination among multiple government institutions. As a result, sanctions imposed on violators often fail to create a sufficient deterrent effect, allowing similar violations to recur. Research on regulatory compliance across different national contexts similarly demonstrates that the symbolic use of enforcement without credible escalation substantially undermines deterrence ([Ayres, & Braithwaite, 1992](#); [Baldwin, Cave, & Lodge, 2012](#); [May, 2004](#)). At the same time, communities adversely affected by spatial planning violations continue to face significant obstacles in accessing relevant information, utilizing complaint mechanisms, and obtaining timely and effective dispute resolution ([Schlosberg, 2007](#); [Holland, Sangster, & Weimer, 2021](#)).

The findings further indicate that improving the effectiveness of law enforcement requires a comprehensive strengthening of spatial planning governance. Such improvements include enhancing the quality and accessibility of geospatial data, accelerating the preparation and updating of Detailed

Spatial Plans that are fully integrated with electronic licensing systems, strengthening the capacity of supervisory authorities, and promoting greater public participation in monitoring housing development ([Healey, 2006](#); [Fung, 2006](#); [Ansell, & Gash, 2008](#)). Equally important is the establishment of stronger interagency coordination to ensure that potential violations are identified at the earliest possible stage, allowing corrective measures to be implemented before causing more extensive environmental or social consequences. Accordingly, law enforcement should not be viewed solely as a mechanism for imposing sanctions but should also emphasize preventive measures through continuous supervision, institutional accountability, and sound governance practices ([Emerson, Nabatchi, & Balogh, 2012](#); [Ostrom, 1990](#)).

#### **4.2 Discussion**

The findings confirm that the effectiveness of spatial planning law enforcement is determined not merely by the existence of legal regulations but, more importantly, by the quality of their implementation in practice. This conclusion is consistent with the theory of legal effectiveness, which argues that successful law enforcement depends on five interrelated factors: the legal framework itself, law enforcement institutions, supporting facilities and infrastructure, community participation, and legal culture ([Soekanto, 2019](#); [Tyler, 2006](#)). The present study demonstrates that weak institutional coordination, limited supervisory capacity, and insufficient compliance among some housing developers continue to undermine the effective implementation of spatial planning regulations. Therefore, achieving effective spatial planning governance requires not only comprehensive legislation but also competent institutions capable of enforcing legal provisions consistently and transparently ([Cullingworth, & Caves, 2009](#); [Booth, 2007](#)).

These findings further reinforce conclusions from comparative urban governance research, which argues that the effectiveness of spatial planning law enforcement depends largely on institutional coordination and the quality of governmental supervision. The present study shows that although the digitalization of licensing systems has significantly improved administrative efficiency, it has not been sufficient to prevent spatial planning violations in the absence of continuous field monitoring. This finding is also consistent with research emphasizing that the success of risk-based licensing reforms depends on the availability of accurate geospatial information, the institutional readiness of local governments, and the effective integration of licensing systems with officially approved spatial planning documents ([Yeh, & Li, 2001](#); [Peng, 2001](#)). Consequently, digital transformation should be accompanied by institutional strengthening to ensure that technological innovation translates into more effective spatial planning governance ([Gil-Garcia, Pardo, & Nam, 2014](#); [Verdegem, & Verleye, 2009](#)).

From the perspective of sustainable development, the study demonstrates that spatial planning violations in housing development extend well beyond legal non-compliance, producing significant environmental, economic, and social consequences. These findings support conclusions from environmental governance literature, which argues that unauthorized land use contributes to environmental degradation, increases disaster vulnerability, and intensifies social conflicts arising from incompatible land utilization ([Bengston, Fletcher, & Nelson, 2004](#); [Tarlock, 2002](#); [Wisner, Blaikie, Cannon, & Davis, 2004](#)). Similarly, the findings align with those demonstrating that housing developments inconsistent with approved spatial plans increase flood risks, reduce infrastructure performance, and diminish the availability of urban green open spaces ([Han, & Lai, 2022](#); [Musakwa & Van, 2013](#)). Accordingly, spatial planning law enforcement should be understood not merely as a legal obligation but as an essential governance instrument for balancing economic development, environmental protection, and legal certainty ([Healey, 2006](#); [Fainstein, 2010](#)).

Taken together, the findings suggest that strengthening the enforcement of spatial planning regulations requires a broader and more integrated approach than simply imposing administrative or criminal sanctions. Government authorities should prioritize the development of technology-based monitoring systems, accelerate the preparation and periodic revision of Detailed Spatial Plans, enhance the professional capacity of law enforcement personnel, and establish more effective coordination mechanisms among central government agencies, local governments, regulatory authorities, and law

enforcement institutions ([Ansell, & Gash, 2008](#); [Emerson, Nabatchi, & Balogh, 2012](#); [Ostrom, 1990](#)). Public participation should also be strengthened through greater transparency, improved public access to spatial planning information, and more accessible complaint and reporting mechanisms, enabling communities to participate actively in monitoring housing development activities ([Fung, 2006](#); [Schlosberg, 2007](#)). Through these integrated measures, spatial planning law enforcement can provide stronger legal certainty while simultaneously promoting orderly, equitable, and sustainable housing development in accordance with the broader objectives of spatial planning governance.

The comparative dimension of these findings also warrants attention. International experience demonstrates that jurisdictions achieving high levels of spatial planning compliance typically combine robust statutory frameworks with well-resourced monitoring agencies, transparent grievance mechanisms, and meaningful civic engagement processes ([Alexander, 2001](#); [Needham, 2006](#); [Alterman, 2010](#)). Countries with strong planning enforcement cultures also tend to invest significantly in professional development for planning officials, ensuring that regulatory decisions are grounded in technical expertise as well as legal knowledge ([Cullingworth and Caves, 2009](#); [Booth, 2007](#)). These international lessons provide valuable benchmarks for institutional reform in contexts where enforcement capacity remains underdeveloped relative to the pace of urban growth.

The role of digitalization in strengthening planning enforcement deserves particular attention in view of technological developments over the past decade. Remote sensing, Geographic Information Systems, and satellite imagery analysis have substantially improved the ability of planning authorities to detect unauthorized construction at early stages, even in areas where physical inspection capacity is limited ([Geertman, & Stillwell, 2004](#); [Peng, 2001](#)). Artificial intelligence tools capable of analyzing building permit databases alongside satellite imagery are increasingly being piloted in various jurisdictions as a means of identifying potential violations before they become entrenched ([United, 2022](#)). The adoption of such technologies in the Indonesian context would require significant investment in both infrastructure and human capital, but the long-term governance benefits are likely to substantially outweigh the initial costs.

## **5. Conclusions**

### **5.1 Conclusion**

This study concludes that the enforcement of spatial planning law in housing development has not yet reached an optimal level, despite Indonesia having established a relatively comprehensive legal framework governing spatial planning. The findings reveal that various forms of non-compliance continue to occur, including housing developments that are inconsistent with the Regional Spatial Plan, deviations from the Detailed Spatial Plan, and violations of applicable licensing requirements. These findings indicate that the existence of a well-developed regulatory framework alone is insufficient to ensure compliance among developers when it is not supported by effective supervision and consistent law enforcement. Accordingly, the effectiveness of law enforcement depends not only on the quality of legislation but also on the capacity of responsible institutions to implement legal provisions in a professional, transparent, and accountable manner.

The study further demonstrates that the effectiveness of law enforcement is shaped by several interrelated factors, including the quality of legal provisions, the competence of law enforcement agencies, the availability of supporting resources and infrastructure, the level of public participation, and the prevailing legal culture, as emphasized in the theory of legal effectiveness. Weak institutional coordination, limited human resources, the underutilization of digital technologies, and insufficient legal awareness among some housing developers continue to hinder effective spatial planning control. Moreover, the predominance of administrative sanctions, without the consistent application of stronger legal measures where appropriate, has reduced the deterrent effect of the enforcement system and allowed spatial planning violations to persist.

Based on these findings, this study argues that strengthening the enforcement of spatial planning law requires a more comprehensive governance approach rather than relying solely on punitive measures. Priority should be given to improving public sector governance, strengthening monitoring and

supervision, optimizing digital licensing and spatial information systems, and enhancing collaboration among central and local governments, law enforcement agencies, housing developers, and the wider community. Through these integrated efforts, law enforcement can function not only as a corrective mechanism for addressing regulatory violations but also as a preventive instrument that promotes orderly, sustainable, and legally compliant housing development. Ultimately, a more effective enforcement system will contribute to greater legal certainty, better protection of the public interest, and the long-term preservation of environmental sustainability within Indonesia's spatial planning framework.

### ***5.2 Research Limitations***

This study has several limitations that should be considered when interpreting its findings. First, the research adopts a qualitative design using an empirical juridical approach, which emphasizes an in-depth understanding of how spatial planning law is implemented in practice rather than providing a quantitative assessment of the effectiveness of existing policies. Consequently, the findings offer rich contextual insights but cannot be generalized to all regions of Indonesia, as the nature of spatial planning challenges and the institutional capacities of local governments vary considerably across different jurisdictions.

A second limitation relates to the scope of the study, which focuses specifically on the enforcement of spatial planning law in the context of housing development. The research does not examine spatial planning violations occurring in other development sectors, such as industrial estates, commercial areas, tourism destinations, or nationally strategic infrastructure projects, each of which presents distinct legal, institutional, and governance challenges. Furthermore, this study does not undertake a comparative analysis across multiple regions, limiting its ability to capture variations in law enforcement practices and institutional performance among different local governments.

Another limitation concerns the availability of comprehensive empirical data. Reliable and integrated statistical information on the incidence of spatial planning violations, the effectiveness of administrative and criminal sanctions, and the level of developer compliance following enforcement actions remains limited. As a result, the analysis relies primarily on legal documents, regulatory frameworks, official planning documents, and in-depth interviews with relevant stakeholders. Nevertheless, to strengthen the credibility and trustworthiness of the findings, the study employed rigorous source, method, and document triangulation. Although these limitations should be acknowledged, they do not diminish the academic value of the research, which provides meaningful insights into the current challenges and opportunities for improving spatial planning law enforcement in Indonesia.

### ***5.3 Suggestions and Directions for Future Research***

Based on the findings of this study, the government should strengthen the enforcement of spatial planning law by enhancing coordination among institutions responsible for spatial planning, licensing, environmental management, public works, and law enforcement. Greater institutional collaboration is essential to ensure that spatial planning regulations are implemented consistently and that violations can be identified and addressed at an early stage. In addition, continuous investment in institutional capacity building, the integration of Geographic Information System-based technologies, the regular updating of Detailed Spatial Plans, and the optimization of digital licensing systems should be prioritized to improve the effectiveness, transparency, and accountability of housing development supervision. Public participation should also be further encouraged through accessible reporting and complaint mechanisms, enabling communities to play a more active role in monitoring land use and supporting regulatory compliance alongside government authorities.

For housing developers, this study highlights the importance of ensuring that all development activities are fully aligned with applicable spatial planning regulations, licensing requirements, and the principles of sustainable development. Compliance with these legal and planning standards not only provides greater legal certainty for developers but also strengthens public trust, enhances corporate credibility, and reduces the likelihood of future legal disputes. At the same time, local

governments should adopt a more consistent approach to enforcing sanctions against spatial planning violations. Fair, timely, and proportionate enforcement is essential for creating an effective deterrent, fostering a stronger culture of legal compliance, and promoting more responsible practices within the housing development sector .

Future research is encouraged to expand upon the present study by employing mixed-methods or quantitative research designs that enable a more objective assessment of law enforcement effectiveness through measurable indicators. Comparative studies across provinces or municipalities could also provide valuable insights into regional differences in institutional capacity, enforcement practices, and policy implementation. In addition, future studies may examine the effectiveness of digital licensing systems and explore the potential of emerging technologies, including Geographic Information Systems, remote sensing, Artificial Intelligence, and big data analytics, in strengthening the monitoring and governance of housing development. Such research would not only enrich the growing body of scholarship on spatial planning law and governance but also provide evidence-based policy recommendations capable of supporting more adaptive, technology-driven, and sustainable spatial planning practices.

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The authors acknowledge that this research has certain limitations and therefore welcome constructive comments and suggestions that may contribute to the improvement of future studies. It is our hope that the findings of this research will make a meaningful contribution to the advancement of legal scholarship, particularly in the fields of spatial planning law and housing development, while also serving as a valuable reference for academics, legal practitioners, policymakers, and the wider community in promoting a more effective, equitable, and sustainable system of spatial planning law enforcement.

### **Author Contributions**

AS conceived the study, designed the research framework, conducted the field interviews, and led the writing of the original draft. NH contributed to the theoretical development, performed the literature review, and reviewed and edited the manuscript. FA collected and analyzed the primary data, conducted document analysis, and assisted in the discussion section. VIC supervised the research design, validated the findings, and provided critical revisions to the final manuscript. All authors have read and agreed to the published version of the manuscript.

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