INTERNATIONAL JOURNAL OF NUSANTARA ISLAM ISSN : 2355-651X

Regional Government Policy on Parking Management in Educational Environments in Cilegon City

Zainal Muttaqin[1*], Apud[2], Uyu Muawwanah[3]

[1,2,3] UIN Sultan Maulana Hassanuddin Banten, Indonesia

[*]Corresponding Author, Email: 243625223.zainalmuttaqin@uinbanten.ac.id

Received: December 13, 2025; *Revised*: May 30, 2026, *Accepted*: July 12, 2026, *Published*: July 13, 2026

Abstract: This study analyzes the Cilegon City regional government's policy on parking management in educational settings through library research. This study examines 40 journal articles and 6 reference books published between 2020 and 2025. This article employs a descriptive qualitative literature review. Data were collected from various academic sources, including scientific journals, books, research reports, education policy documents, regional regulations, and mayoral/regent regulations relevant to local government policy on parking management in educational settings. These sources were systematically analyzed to identify concepts, theories, best practices, and challenges in implementing local government parking management policies in educational settings. Content analysis was conducted to map the key dimensions of local government policy, effective implementation strategies, and success factors and obstacles that influence the effectiveness of local government policy on parking management in educational settings.

Keywords: educational environment; local government policy; parking management.

Introduction

Transportation plays a crucial role in supporting the smooth running of educational activities, both in schools and universities. The increasing number of private vehicles owned by students, teachers, and educational staff has led to a growing need for adequate and well-organized parking facilities. In Cilegon City, parking issues in educational environments often lead to various social and environmental problems, such as traffic congestion around schools, irregular vehicle parking, and the emergence of illegal levies that violate regulations (Shoup, 2005).

The transportation sector plays a crucial role and is inseparable from efforts to support the smooth and effective running of educational activities, both at the elementary and secondary school levels and in higher education settings. Safe, fast, and orderly mobility access is the main foundation for all school members to be able to start teaching and learning activities on time without any obstacles along the way. However, along with economic growth and easier access to vehicle ownership, there has been a significant increase in the number of private vehicles, both two-wheeled and four-wheeled, among students, teachers, and education personnel. This surge in fleet numbers is automatically directly proportional to the soaring need for spacious, adequate, safe, and well-organized parking facilities within educational institutions (Litman, 2020).

The reality on the ground often fails to keep pace with the rapid growth of vehicles, as is currently the case in Cilegon City. The limited and irregular parking facilities in this city's educational environment have become a source of complex social and environmental problems. At crucial times, such as when school starts and ends, the lack of adequate parking management

leads to vehicle congestion, which takes up significant space on the main road. As a result, severe congestion around school areas is unavoidable, ultimately disrupting the comfort and rights of other road users and reducing the productivity of the surrounding community (Marsden, 2006).

The negative impact of this chaotic situation goes beyond traffic flow. The irregular placement of vehicles in both internal and external school areas creates a chaotic landscape, damages the aesthetics of the environment, and increases the risk of accidents and vehicle theft. This disorganized situation then opens the door to the emergence of new and disturbing social problems, such as the rampant practice of illegal parking fees (*pungli*) by irresponsible individuals. This illegal practice operates taking advantage of emergency situations outside of official regional regulations, thus not only burdening parents and school residents financially but also creating an unhealthy and unsafe educational climate. Therefore, firm synergy is needed between the local government, the transportation agency, and school management in Cilegon City to formulate regulations and parking spatial plans that are solutions to restore the function of a conducive school environment (Banister, 2008).

This phenomenon indicates that parking management in educational areas is not yet effective and requires serious attention from local governments. As public service providers, local governments are obligated to ensure that the parking management system operates in accordance with the principles of good governance, which emphasize transparency, accountability, effectiveness, efficiency, and public participation (Grimmelikhuijsen et al., 2013).

Although the Cilegon City government has established several policies and regulations regarding parking fees and management, their implementation in the field still faces various obstacles. Lack of coordination between agencies, weak oversight, and minimal application of information technology in the parking management system are the main factors hampering the effectiveness of these policies. Rules written on paper often lose their edge when faced with the dynamic realities of the streets. One fundamental factor at the root of this weakness is the persistent ego-sectoral nature of bureaucratic governance, reflected in the lack of coordination and solid synergy between related agencies—such as the Transportation Agency, the Public Order Agency, and local territorial authorities. Due to this misalignment of vision and division of labor, enforcement of regulations is partial and fails to address the root of the problem (O'Toole, 2015).

Another crucial factor that further exacerbates the ineffectiveness of this policy is the weak oversight and enforcement system implemented by the authorities. The infrequent regular patrols, the lack of firm sanctions for violators, and the prolonged neglect of illegal parking areas create a climate of tolerance that actually fosters disorder. Illegal parking attendants and motorists lack a sense of deterrence because legal loopholes and lax oversight on the ground are so easily exploited. This situation is further exacerbated by the fact that the existing oversight system still relies on conventional methods that are highly vulnerable to manipulation and hidden collusion (Winter, 2012).

In this modern era, this ineffectiveness is further emphasized by the very minimal penetration and implementation of information technology in the parking management system in Cilegon City. The majority of fee collection and vehicle volume recording are still done manually using traditional paper tickets, often without valid proof of payment. The absence of digital systems—such as e-parking, space occupancy sensors, or app-based violation reporting platforms—leads to very low transparency in the flow of fee funds and the risk of leakage. Without technological modernization, local governments struggle to obtain accurate, real-time data to evaluate policies. These digital limitations, combined with weak oversight and poor institutional coordination, have become major stumbling blocks that continually hamper the effectiveness of parking governance reform in Cilegon City (Kitchin, 2014).

Based on these conditions, a more in-depth analysis is needed to determine the extent to which local government policies regarding parking management in educational settings have been effectively implemented. Furthermore, this study aims to identify obstacles encountered in implementation and formulate strategies that can improve the effectiveness and accountability of parking management in the future. Thus, the results of this study are expected to contribute to

local governments in designing more targeted, transparent, and sustainable parking management policies, as well as being able to create a safe, orderly, and conducive educational environment for all school residents (Ansell & Gash, 2008).

Various previous studies have reviewed the Analysis of the Implementation of Yogyakarta City Regional Regulation No. 2 of 2019 Concerning Parking (Irvan et al., 2024). Analyzing the implementation of Regional Regulations in Yogyakarta City regarding public parking; found many implementation obstacles such as supervision and coordination. Provides an overview of the implementation of parking policies at the regional level that can be compared with the specific context of the educational environment. Evaluates parking management policies in Kutai Kartanegara Regency; focuses on social issues and contributions to regional revenue. Can be used to understand how parking policies also impact various stakeholders including educational institutions if implemented there (Ramdhan et al., 2024). Examining the implementation of parking fees from a governance perspective (transparency, accountability) in Sinjai Regency, Relevant in seeing the aspect of "good governance" which is also important in an orderly and safe educational environment. Meanwhile (Gurusi et al., 2025) discusses regulations and opportunities for utilizing e-parking to increase efficiency and transparency in Baubau City. Digital technology (e-parking) can be an important strategic part of parking management at schools/campuses.

The evaluation of parking management in Pekanbaru City focuses on the good governance and NPM approaches; finding obstacles such as illegal parking and lack of community participation. This can be used as a comparison of how parking management in densely populated areas (such as schools) requires synergy between regulation and participation. Most studies focus on public parking in urban areas, without addressing how parking policies are implemented in educational areas with unique characteristics (specific peak hours, regular users, and socio-educational functions). Previous studies have examined the implementation, retribution, governance, and digitalization aspects of parking policies in general in urban areas. However, no research has specifically focused on local government policies regarding parking management in educational environments using a good governance and digital transformation approach as a strategy to increase the effectiveness and transparency of governance (Meijer & Bolívar, 2016).

The scientific novelty of this study lies in its in-depth examination of local government parking management policies, focusing specifically on the educational environment, an area of study that has received little attention in previous research. Unlike several previous studies that focused more on urban parking policies, retribution systems, and the implementation of e-parking technology, this study offers a new perspective by making schools or madrasahs the center of regional public policy analysis. Furthermore, the uniqueness of this study lies in its integrative approach, combining good governance principles such as transparency, accountability, effectiveness, and community participation with aspects of educational transportation management and the application of digital technology. This study not only seeks to assess the effectiveness of local government policies but also examines their impact on order, security, and efficiency of activities in educational environments, particularly in Cilegon City. Therefore, this study is expected to provide a scientific contribution in the form of developing a conceptual model for parking management in educational environments based on good governance and digital innovation. This model can serve as a reference for other local governments in designing more transparent, participatory, and sustainable parking policies in the future (Janssen & Estevez, 2013).

The main problem highlighted in this study is the suboptimal role and policies of local governments in regulating and managing parking systems in educational settings, particularly in Cilegon City. The reality on the ground shows that parking management in schools still faces various obstacles, including limited parking space, irregular vehicle arrangements, the emergence of illegal levies, the lack of permits for parking operators around schools or madrasahs, and weak supervision and coordination between local governments and educational institution managers. Furthermore, the implementation of existing parking policies does not fully reflect the principles of good governance, particularly in terms of transparency, accountability, and public participation. The minimal application of digital technology innovations, such as the e-parking

system, also causes parking management in educational settings to remain traditional and inefficient. Therefore, this study focuses on analyzing the effectiveness of local government policies in managing parking in educational settings, identifying various factors that hinder their implementation, and formulating alternative strategies based on good governance and digital transformation to create an orderly, transparent, accountable, and sustainable parking system (Gil-Garcia et al., 2018).

The main objective of this article is to analyze and formulate local government policy strategies related to parking management in educational settings, focusing on the context of Cilegon City. This research seeks to examine the effectiveness of policies implemented by local governments in regulating school parking systems, while simultaneously identifying various obstacles that arise during their implementation. Furthermore, this research aims to develop policy recommendations based on the principles of good governance and the use of digital innovation, with the aim of creating more orderly, transparent, efficient, and sustainable parking management in educational settings (Mergel et al., 2019).

Method

This study uses a qualitative method with a library research approach to examine (Creswell & Creswell, 2017). Primary data sources come from national and international scientific journal articles indexed by Sinta, Scopus, and Google Scholar in the period 2020-2025 (the last five years), as well as reference books, regional regulations, mayoral/regent regulations relevant to the theme of local government policy on parking management in educational environments. The literature search was conducted in September-November 2025 using the keywords: "local government policy", "parking management", "educational environment", and a combination of these in Indonesian and English. A total of 40 journal articles and 6 books were collected as well as regent/mayoral regulations and analyzed in depth to build a conceptual framework for the study.

The data analysis technique used content analysis with the following stages: (1) identification of main themes related to local government policy; (2) classification of findings based on dimensions of local government policy; (3) synthesis of concepts and theories to build a comprehensive framework; (4) interpretation of data to formulate strategies and practical recommendations; and (5) triangulation of sources to validate the findings. The analysis process was carried out systematically using an analysis matrix to ensure consistency and depth of the study, with a focus on identifying patterns, causal relationships, and knowledge gaps in the literature reviewed.

Results and Discussion

Parking, as a tool for managing transportation needs, requires a well-planned, organized, and integrated parking management strategy to create parking management that can increase local revenue (PAD). Poor parking conditions significantly disrupt the overall traffic system and result in significant leakage. When implementing parking management, it is important to consider the interests of all parties to avoid social unrest. Furthermore, all existing limitations must be taken into account so that the Cilegon City Transportation Agency can effectively implement the parking management process described above (Marsden, 2006).

As a vital instrument in transportation demand management, parking should no longer be viewed merely as a temporary stopping point for vehicles, but rather must be managed through a well-planned, organized, and integrated strategy at a macro level. Modern and systematic parking management has great potential as a driving force for the regional economy, directly boosting the realization of Regional Original Income (PAD). When the parking system is designed with a mature blueprint, starting from zoning mapping, tariff digitization, and transparency of regional government fund flows, it can optimize financial potential niches that have often been untapped. This integration also means aligning parking policies with public transportation systems and city spatial plans, so that parking instruments can function as vehicle volume controllers in busy centers (Barter, 2015).

Conversely, poor, conventional, and directionless parking services will become a heavy burden on the city's lifeblood. This mismanagement has a domino effect, significantly disrupting the overall traffic system, triggering new congestion points due to uncontrolled on-street parking,

and reducing road safety. Furthermore, chaotic and manual management creates a wide gap that results in significant revenue leakage. Revenue funds that should be channeled into regional coffers for the construction of public facilities instead flow into illegal pockets due to weak oversight systems and the absence of technology-based audits (Pierce & Shoup, 2013).

Therefore, in formulating and implementing solutions to this parking mess, the Cilegon City Transportation Agency (Dishub) is required to act tactically and inclusively. Handling parking issues must consider the interests and living spaces of all parties involved, from road users, business owners, the surrounding community, to local parking attendants, to avoid sparking social resistance or unrest within the community. A humanistic and dialogical approach is key to ensuring that new policies are not perceived as detrimental to one party. Furthermore, the Dishub must also be realistic, considering all existing fiscal, personnel, and infrastructure limitations (Ansell & Gash, 2008).

By mapping the priority scale and utilizing these limitations creatively, for example through a strategic partnership scheme or the gradual application of appropriate technology, the designed formula for handling parking problems can be down to earth and implemented in the field well, sustainably, and have a real impact on the mobility of Cilegon City (Mergel et al., 2019).

As a significant source of local revenue (PAD), parking fees play a strategic role in generating additional revenue while managing urban spatial planning. The Cilegon City government's policy on parking management in educational environments essentially refers to the general parking regulations that apply throughout the city, as there are no specific provisions that differentiate educational environments from other areas. The main regulation is Cilegon City Regional Regulation (Perda) Number 9 of 2012 concerning Parking Implementation, which aims to organize the parking system to support smooth traffic flow, safety, and user comfort. This regulation is complemented by Mayoral Regulation (Perwali) Number 11 of 2018 as its implementation guidelines, as well as related regulations such as Perda Number 1 of 2012 concerning Parking Retribution (Stone et al., 2023).

Requirements for Parking Managers Parking managers, including those around educational institutions, must meet the following standards: 1) Business Permit: Must obtain a permit from the Mayor or a designated official. This includes a traffic impact analysis, construction requirements (for parking buildings), and supporting facilities such as security and cleanliness. Private managers must report monthly activities to the Regional Technical Implementation Unit (UPTD) for Parking. Recently, the Cilegon City Government (Pemkot) recorded 23 unlicensed parking spots, including those around schools, and threatened sanctions if they were not immediately addressed - bphn.go.id. 2) Operational Obligations: Maintain cleanliness, security, order, and comfort; provide officer uniforms, official tickets, and vehicle insurance; and arrange vehicles in an orderly manner (e.g., without layers). Managers are prohibited from transferring duties without permission. Prohibitions: May not charge fees exceeding the provisions, and educational institutions such as schools are prohibited from interfering in the parking business (such as directing students to certain locations to collect fees), because they must focus on education. This was emphasized in the polemic case at MAN 1 Cilegon, where the Ministry of Religion issued a warning, even though this was not directly from the City Government (Marsden, 2006).

Taxes, Levies, and Fees, 1) Parking Levy: Collected using an official ticket for one parking, with rates regulated in Regional Regulation Number 1 of 2012. Private operators may charge parking fees, but not more than twice the local government's levy rate. 2) Parking Tax: Operators are required to register a Regional Taxpayer Identification Number (NPWD) and deposit 10% of their income into the regional treasury as Land and Building Tax for Certain Services (PBJT) or parking tax. The City Government is optimizing Local Original Income (PAD) from vehicle storage objects, with outreach to 22 points in 15 locations, including around educational areas. 3) Parking Users: Must pay the levy when leaving the location and obey parking signs/signs (Pierce & Shoup, 2013).

Supervision, Control, and Sanctions, 1) Supervision: Carried out by the City Government through the Parking UPTD, including controlling vehicles parked haphazardly (for example, by towing, costs borne by the owner). 2) Administrative Sanctions: Warnings, permit suspension, permit revocation, or closure of parking lots for violating managers. 3) Criminal Sanctions: Imprisonment

for a maximum of 3 months or a fine of up to IDR 50 million for violations such as operating without a permit or parking in prohibited areas (Behr & Theune, 2017).

Latest Implementation (October 2025)

The Cilegon City Government is actively conducting outreach and enforcement, particularly following a controversy at MAN 1 Cilegon, where parking managers directed students to locations without official permits. This demonstrates a commitment to ensuring all parking, including those around schools, is licensed and contributes to the Regional Original Revenue (PAD). Any managers in educational settings who do not have permits are asked to immediately process them through the Investment and One-Stop Integrated Services Agency (DPMPTSP). Overall, this policy is general and inclusive, with an emphasis on regulations to prevent abuse in sensitive areas such as education. For further details, it is recommended to access the official JDIH Cilegon City website or consult with DPMPTSP.

The Cilegon City Government (Pemkot) is currently intensively and actively conducting a series of massive socialization as well as firm law enforcement actions in the field, especially after the parking polemic emerged in the area around MAN 1 Cilegon. In this case, there were indications that parking managers were directing student vehicles to holding locations that did not have official permits from the relevant authorities. The government's swift response in handling this incident is concrete proof of the commitment and seriousness of the Cilegon City Government in ensuring that all parking points—without exception, including those located in sensitive areas around educational institutions—must operate under a legal umbrella and make a real contribution to Regional Original Income (PAD). This step was taken to completely eliminate the space for illegal commercialization that often exploits the assets and activities of school residents (Peters, 2018).

As part of its persuasive and solution-oriented measures, the Cilegon City Government issued a stern appeal to all elements of society and private entities currently managing parking spaces within educational institutions without formal legal standing. They were asked to immediately cease their illegal activities and expedite the official permit process through the Cilegon City Investment and One-Stop Integrated Services Agency (DPMPTSP). Through this standardization, the government aims to ensure that every plot of land used for parking meets the technical requirements of feasibility, security, and tariff transparency in accordance with regional regulations (de Vries et al., 2016).

Overall, the policy structure implemented by the Cilegon City Government is general, fair, and inclusive, with regulations applied equally to all parties without discrimination. However, the focus of this regulation is deliberately tightened in sensitive areas such as educational zones, with the primary goal of preventing abuse of authority, land exploitation, and social disturbances that could undermine the conducive learning and teaching climate. Strict oversight in this sector is crucial to maintaining the reputation of educational institutions from thuggery practices under the guise of parking management. For land managers, schools, and the public who require more detailed information regarding procedures, requirements, and binding legal regulations, it is strongly recommended to access the official website of the Cilegon City Legal Documentation and Information Network (JDIH) or come directly to consult with the Cilegon City DPMPTSP (Meijer, 2015).

The Head of the Cilegon City Investment and One-Stop Integrated Services Agency (DPMPTSP), Hayati Nufus, appealed to all parking operators in Cilegon City to immediately apply for business permits. He delivered the appeal during the Socialization of Business Licensing for Off-Street Parking Activities in the Transportation Sector held at the Cilegon City DPMPTSP Building on Wednesday, September 24, 2025. On that occasion, Nufus revealed that there were 23 parking operators in Cilegon City who still did not have business permits spread across three sub-districts, namely Citangkil, Cibeber, and Cilegon.

"So far, only 23 parking operators have been found to not have business permits, and this is only in three sub-districts, not in other sub-districts," he said. Nufus emphasized the importance of compliance with licensing regulations to create orderly and legal parking management. He also explained that parking business permits are not just a formality, but can be an important part of increasing local revenue (PAD). "Yes, it can help, I don't know how much, we are only trying to find potential that can increase PAD, one of which is from this parking management, not only from

parking, we will also explore other potential," he said. Nufus explained that the process of processing a parking permit begins with the creation of a Business Identification Number (NIB), followed by submitting a Technical Recommendation to the Transportation Agency. "Later, Transportation Agency officers will conduct a site survey where the results of the survey will be the basis for issuing a Technical Recommendation, which will then be brought back to the DPMPTSP for issuing a parking permit," he explained.

After a parking permit is issued, Nufus said, parking managers are also required to obtain a Regional Taxpayer Identification Number (NPWD) and deposit 10 percent of gross parking revenue. "The proceeds from the parking tax will later contribute to Cilegon City's regional revenue," he explained.

Nufus also reminded that parking operators who fail to obtain permits will be subject to sanctions. These sanctions can range from administrative to criminal sanctions for failing to comply with applicable regulations. "This business permit is not only to legalize the business, but also a form of compliance. Those who fail to obtain permits will certainly face consequences," he stressed. Finally, Nufus explained that the legal basis for parking business permits is regulated through various regulations. These include Regional Regulation (Perda) Number 9 of 2012 concerning Parking Management, Mayoral Regulation (Perwal) Number 11 of 2018 concerning Guidelines for the Implementation of Regional Regulations, and Regulation of the Minister of Transportation of the Republic of Indonesia Number 12 of 2021 concerning Standards for Business Activities and Products for the Implementation of Risk-Based Business Licensing in the Transportation Sector.

Meanwhile, the Head of the Cilegon City Transportation Agency, Heri Suheri, emphasized that his office is ready to assist parking operators in obtaining legal status and legal guarantees for their businesses. Heri said that vehicle storage operators are included in the category of taxpayers who must comply with regulations. "Vehicle storage businesses, both two-wheeled and four-wheeled, are taxpayers. This is in accordance with the mandate of Law Number 28 of 2009, Law Number 1 of 2022, Government Regulation Number 35 of 2023, and Regulation of the Minister of Home Affairs Number 15 of 2024. All of these regulations require vehicle storage businesses to be taxpayers," he said. Heri also revealed that business permit provisions apply to all parking operators in Cilegon City without exception. "Parking operators must have permits to have a clear legal basis and comply with statutory regulations."

The Significance of Local Government Policy on Parking Management in Educational Environments

Local government policies are crucial in determining the direction, effectiveness, and sustainability of parking management in educational settings. As autonomous entities, local governments play a key role in ensuring that parking management adheres to the principles of order, efficiency, and public service. Through appropriate policies, local governments can create a safe, comfortable educational environment that optimally supports teaching and learning activities (Ramdhan et al., 2024). From a regulatory perspective, the significance of local government policies is evident in providing a clear and firm legal basis for parking management in educational settings.

Policies formulated by local governments play a crucial role and have profound significance in determining the strategic direction, effectiveness, and long-term sustainability of parking management systems, particularly within educational institutions. As entities endowed with regional autonomy and regulatory authority, local governments act not merely as passive supervisors, but as primary architects fully responsible for ensuring that all parking management around schools and universities is aligned with the principles of public order, spatial efficiency, and a focus on excellent public service. Without decisive and visionary policy intervention from local governments, spatial planning around educational zones will be highly vulnerable to congestion, sectoral egos, and illegal commercialization that harm the wider community.

Through the formulation of comprehensive, data-driven, and targeted policies, local governments are able to integrate the mobility needs of school residents with broader urban spatial planning. These policies provide a strong legal framework for regulating parking facility adequacy standards, limiting permitted zoning, and reducing the risk of social conflict and extortion. When these regulations are consistently implemented and supported by strict oversight,

local governments directly contribute to creating an educational environment that is not only safe from potential crime and traffic accidents, but also comfortable and aesthetically pleasing. The presence of well-organized public spaces around school gates will ultimately minimize psychological and physical disturbances caused by street chaos, thus optimally supporting the smooth running of all teaching and learning activities and maintaining the academic reputation of the educational institution.

Regional regulations (Perda) or mayoral regulations governing parking mechanisms can prevent illegal parking practices, optimize land use, and strengthen management accountability (Subarsono, 2012). From an institutional and governance perspective, regional policies serve to strengthen synergy between agencies, such as the Department of Transportation, educational institutions, security forces, and the surrounding community. This cross-sector collaboration is an implementation of the principles of good governance, which emphasize transparency, accountability, and public participation in the implementation of public policy (Rondinelli & Cheema, 1983; Togala et al., 2025).

From a social and educational perspective, regional policies also play a role in fostering collective awareness among school communities about the importance of discipline and orderly parking. Through outreach and education, the government can encourage behavioral changes that support order and safety in educational settings (Edwards III, 1980). Furthermore, from an economic and technological perspective, regional government policies that encourage the implementation of digital systems such as e-parking contribute to increased operational efficiency and revenue oversight. The digitization of parking systems also strengthens fiscal transparency and reduces potential leakage of Regional Original Income (PAD) (Parkir, n.d.). From an environmental and sustainability perspective, regional government policies that adopt green parking principles play a significant role in creating an environmentally friendly educational environment oriented toward sustainable development (Wahab, 2025).

Thus, local government policies have strategic significance in establishing a parking management system that emphasizes not only economic aspects but also social, ecological, and educational ones. Adaptive, participatory, and technology-based policy implementation will be key to creating orderly, safe parking governance that supports the vision of sustainable educational development.

Contribution of Local Government Policy to Parking Management in Educational Environments

Local government policies play a strategic role in creating an orderly, efficient, and sustainable parking management system in educational settings. Through appropriate regulations and policy interventions, local governments serve as facilitators, regulators, and catalysts in aligning parking governance with the principles of public service and urban spatial planning (Dye & Dye, 1972; Subarsono, 2012). From a regulatory perspective, local government policies contribute to establishing a legal framework governing parking mechanisms in schools and campuses. The existence of local regulations (Perda) or regional head policies regarding parking rates, supervision, and management plays a crucial role in preventing illegal parking practices and increasing manager accountability (Irvan et al., 2024).

Local government policies play a highly strategic and fundamental role in designing and realizing an orderly, efficient, and sustainable parking management system within educational institutions. Through mature regulatory instruments and targeted policy interventions, local governments act not merely as passive supervisors but rather as crucial multifaceted facilitators, regulators, and catalysts. As facilitators, local governments bridge the gap between meeting the need for adequate facilities for school residents. As regulators, they establish firm legal boundaries, and as catalysts, they encourage the acceleration of parking governance modernization to ensure it remains aligned with the principles of excellent public service and integrative macro-urban spatial planning. These interventions create a clear dividing line between a chaotic school environment and an educational ecosystem conducive to public mobility.

When examined in depth from a regulatory perspective, policies issued by local governments make a significant contribution to establishing a strong, comprehensive, and binding legal framework for regulating all parking operational mechanisms in school and

campus areas. The existence of formal legal instruments, such as Regional Regulations (Perda) or specific policies of regional heads that regulate official tariff standardization, regular monitoring mechanisms, and zoning management systems, plays a vital role in closing the gaps for misuse in the field. These repressive and preventative regulations have proven effective in preventing the proliferation of illegal parking practices that often trigger severe congestion around institutional gates. Furthermore, the legal certainty provided through these policies automatically increases the accountability and transparency of parking managers, so that every financial contribution collected can be openly accounted for and returned to its function for the convenience of the community and strengthening Regional Original Income (PAD).

From an institutional perspective, local government policies encourage synergy between agencies, particularly the Department of Transportation, educational institutions, and the surrounding community. This cross-sectoral coordination aligns with the principles of good governance, which emphasize transparency, accountability, and public participation (Ramdhan et al., 2024; Togala et al., 2025). From a social and educational perspective, local governments play a role in fostering a culture of orderly parking through education, outreach, and coaching within the educational environment. This participatory approach has the potential to raise collective awareness among school communities about the importance of traffic discipline (Edwards III, 1980; Subarsono, 2012). Furthermore, from a technological and fiscal transparency perspective, the implementation of a digital parking system (e-parking) contributes to increased operational efficiency and oversight of regional revenues.

The digitization of the parking system also supports transparency in fees and reduces potential leakage of Regional Original Income (PAD) (Parkir, n.d.; Ramdhan et al., 2024). Finally, from an environmental and spatial planning perspective, local government policies need to be directed towards supporting sustainability through the implementation of green parking concepts, controlling vehicle volumes, and environmentally friendly land use planning (Wahab, 2025). Overall, local government policies serve not only as regulatory instruments but also as regional development strategies that balance economic interests, social order, and environmental preservation (Dye & Dye, 1972; Rondinelli & Cheema, 1983). With an integrated, adaptive, and technology-based policy approach, parking management in educational environments can be implemented in an orderly, transparent, and sustainable manner.

Implications of Local Government Policy on Parking Management in Educational Environments

The results of this study indicate that local government policies for managing parking in educational settings still face various obstacles, both in terms of regulations, institutions, and implementation. From a regulatory perspective, there are no local regulations specifically governing parking systems in educational areas. As a result, the policies implemented are still general and have not been adapted to the characteristics and needs of each educational institution. This situation has given rise to overlapping authority between transportation agencies, schools, and local parking managers. From an institutional perspective, coordination between relevant agencies remains weak, particularly regarding the supervision and enforcement of parking regulations (Howlett & Rayner, 2007).

The findings of this study clearly demonstrate that policies implemented by local governments in managing parking in educational environments still face a thick wall filled with various structural obstacles, ranging from regulatory and institutional aspects, to the level of practical implementation in the field. From a regulatory perspective, the legal vacuum is a crucial root of the problem due to the lack of regional regulations (Perda) or derivative regulations that specifically, in detail, and comprehensively regulate the implementation of special parking systems in educational areas or zones. Due to the absence of this specialized legal umbrella, the policies adopted and implemented in the field so far remain too general. These generic policies are considered to fail to capture the dynamics in the field because they are unable to adapt to the unique characteristics, land capacity, and varying mobility needs of each educational institution, from elementary school to university level (Peters, 2018).

The domino effect of this fragile regulatory foundation has led to a confusing overlap of authority between the Transportation Agency, school or campus management, and local parking management groups. Each party often operates with its own interpretation of its duties without clear boundaries of responsibility. This chaotic situation is further exacerbated by a murky institutional landscape, where coordination between relevant agencies is perceived to be very weak and fragmented. This weak coordination is particularly evident in the regular monitoring and enforcement of parking violations. Without a working understanding, shared commitment, and institutional firmness in enforcing sanctions, on-the-ground oversight becomes ineffective, allowing illegal parking operators to easily exploit this bureaucratic laxity to continue operating without regard for order in the educational environment (Emerson et al., 2012).

Limited human resources and supporting infrastructure also contribute to the effectiveness of policy implementation in the field. Meanwhile, from a social perspective, it was found that the level of awareness and discipline among school residents regarding vehicle management remains low. It is not uncommon for educational areas to be used as public parking lots by the surrounding community, leading to irregularities and potential land use conflicts. Furthermore, local governments still tend to view parking management solely as a means of increasing Regional Original Income (PAD), rather than as an essential part of the transportation and public service system. Therefore, more contextual, collaborative, and technology-based policies—such as the implementation of an e-parking system—are needed to ensure efficient, transparent, and sustainable parking management in educational settings (Meijer, 2015).

Complexity of Challenges and Relevance of Contextual Solutions

Parking management in educational settings is a public policy issue that often receives little attention, despite its significant implications for order, safety, and comfort in school and university areas. In this context, local governments have a responsibility to ensure that parking policies are not only oriented towards increasing Regional Original Revenue (PAD) but also serve as a strategic instrument for traffic control and the realization of sustainable urban planning.

The relevance of contextual solutions to address the complexities of parking management in educational settings requires a strategy that is contextual and adaptive to regional characteristics, the institutional capacity of educational units, and the social conditions of the surrounding community. The policy approach applied must consider local dynamics to ensure effective, efficient, and sustainable implementation.

1. Regulatory and Institutional Approaches

One strategic step that needs to be taken is strengthening the regulatory and institutional aspects of parking management. Local governments are expected to draft Regional Regulations (Perda) specifically governing parking systems in educational areas, including tariff setting, management mechanisms, and operational oversight. Furthermore, institutional synergy is needed between local governments, transportation agencies, and schools or universities to create integrated and accountable parking governance. Regular monitoring and evaluation are crucial to ensuring the effectiveness and sustainability of these policies (Hill & Hupe, 2009).

Local governments can no longer rely on conventional, general regulations; instead, they are expected to draft and issue special Regional Regulations (Perda) that specifically, rigidly, and comprehensively regulate parking systems in and around educational areas. These written regulations must include clear codification of fair official rates, standardized land management mechanisms, and strict limits on daily operational oversight. With a legal framework specifically designed for school and campus zones, opportunities for speculators and illegal operators to exploit educational environments can be effectively closed (Howlett & Rayner, 2007).

However, the existence of ideal regulations on paper will lose their meaning without the support of solid, harmonious, and integrative institutional synergy. Multidimensional collaboration involving local governments, transportation agencies, law enforcement officials, and the internal management of schools and universities is necessary. Sectoral egos, which have served as barriers, must be broken down to create a parking management system that is not only integrated with the city's transportation system but also highly accountable to the public (Emerson & Nabatchi, 2015).

With the city's transportation system but also highly accountable to the public. Complementing this ecosystem, the regular and consistent monitoring and evaluation (monev) process must be positioned as a pillar of the instrument that cannot be overlooked. Through routine field audits, the government and institutions can early detect potential levy leaks, traffic congestion during peak hours, and other indications of procedural irregularities. The data from these regular evaluations will then serve as a compass for policymakers to calibrate and continuously improve the system, ensuring that parking arrangements in educational environments are effective, adaptable to vehicle growth, and oriented towards long-term comfort (Moyson et al., 2017).

2. Participatory and Educational Approach

This approach is a key factor in building a culture of disciplined parking within educational settings. Active involvement of all elements of the educational community, including students, educators, and the surrounding community, needs to be realized through public education and outreach programs on the importance of orderly parking. Furthermore, student organizations and school committees can be involved as part of the monitoring and development mechanisms for parking user behavior. Programs such as "Parking Discipline Schools" can be used as a character education instrument to instill the values of discipline, responsibility, and environmental stewardship (Berkowitz & Bier, 2005).

A participatory and educational approach plays a central role and is often the primary determining factor in building a strong, ingrained, and sustainable parking culture within educational institutions. Relying solely on coercion or legal sanctions to change traffic chaos will never be enough; collective awareness is needed, growing from within the school ecosystem itself. Therefore, the active and collaborative involvement of all elements of the educational community, from students, teachers, lecturers, and educational staff to residents and businesses surrounding the educational institution, is essential. This step can be accelerated through the development of a massive outreach program and creative public education on the importance of proper driving and parking regulations. When all parties understand that parking order directly impacts student safety and the smooth flow of shared mobility, resistance to change can be minimized (Ostrom, 1990).

Furthermore, to ensure effective internalization of the rules in practice, internal organizations such as the Intra-School Student Organization (OSIS), the Student Executive Board (BEM), and the school committee must be empowered and actively.

3. Technological Approach

The use of modern technology is an innovative step towards realizing a transparent and efficient parking system. Implementing a digital parking system (e-parking) can improve accountability in retribution management and minimize potential regional revenue leakage. Furthermore, installing CCTV cameras and utilizing digital-based applications can strengthen the monitoring and enforcement system in the field. Furthermore, integrating parking data with urban transportation systems can support the implementation of sustainable smart mobility policies.

The use and integration of cutting-edge modern technology is a highly innovative and crucial breakthrough in efforts to overhaul the conventional parking system towards transparent, accountable, and efficient governance in educational environments. The digital era demands solutions that no longer rely on manual recording that is vulnerable to manipulation. The implementation of a digital parking system (e-parking) such as the use of electronic card-based automatic barriers, QR code scanners, and cashless payment applications will significantly increase accountability in the management of fees. This digitalization step automatically closes loopholes for illegal underhand transactions and minimizes the potential for revenue leakage, which has often been a parasite on Regional Original Income (PAD). With this system, every rupiah spent by parking users is recorded in real time and goes directly to the appropriate cash.

On the other hand, strengthening security and surveillance aspects in the field can be accelerated massively through the installation of high-spec CCTV cameras (CCTV) networks at strategic points and the use of digital-based monitoring applications. The presence of this visual surveillance technology not only functions as a preventative measure to reduce crime rates such as motor vehicle theft, but also serves as valid evidence to strengthen regulation enforcement and take

action against parking zoning violators. School security authorities and the Transportation Agency can monitor the dynamics of vehicle density in the pickup area without having to deploy excessive personnel at one location.

4. Economic and Environmental Approach

Parking management policies need to be designed with a balance between economic aspects, social justice, and environmental sustainability in mind. Setting parking rates proportional to available facilities must be accompanied by transparency in revenue management. A portion of the revenue can be allocated to support educational and environmental conservation programs, such as reforestation, waste management, or the development of water catchment areas within school grounds. Implementing the "green parking" concept, which considers ecological and aesthetic aspects, is a strategic step in creating an orderly, safe, and environmentally friendly educational environment (Wahab, 2025).

Parking management policies in educational settings should not be viewed solely from the perspective of providing physical space, but rather must be designed comprehensively, taking into account the dynamic balance between economic growth, social justice, and long-term environmental sustainability. Within the economic and justice dimensions, parking rates must be proportional, with the amount charged aligned with the quality of the facilities, security guarantees, and comfort provided to users. This principle must go hand in hand with a commitment to absolute transparency in revenue management. All funds collected from this levy sector must not evaporate without clarity, but must be recorded regularly and transparently so that they can be accounted for to the school community and local authorities (Banister, 2008).

To create a positive multiplier effect, this financial management formula can adopt an innovative revenue-sharing system. A portion of the legal parking fee revenue can be specifically reallocated to support internal programs to improve the quality of education and environmental conservation agendas around the institution. These funds can be concretely transformed into capital for financing greening programs, revitalizing school waste and sewage management systems, and building ecological infrastructure such as water absorption wells and biopores in vehicle storage areas. This step ensures that every rupiah spent by school residents contributes directly to the comfort of the ecosystem where they learn (Agyeman & Evans, 2004).

The consistent implementation of the green parking concept is a highly relevant tactical and strategic step to be executed in this modern era. This concept requires overhauling the architectural design of traditional parking areas, which are generally arid and subject to high temperatures, into environmentally friendly areas that pay attention to aesthetic value. This can be realized through the use of porous paving blocks that support rainwater absorption into the soil, planting shady shade trees to reduce the urban heat island effect, and providing supporting facilities for green mobility such as dedicated bicycle parking areas and integrated electric vehicle charging stations. Through a harmonious combination of accountable economic governance and measured ecological interventions, the educational environment will not only be free from clutter but also transformed into an orderly, safe, healthy area, fully aligned with the principles of sustainable development (Newman & Kenworthy, 1999).

Theoretical and Practical Synthesis of Regional Government Policies on Parking Management

Overall, the findings of this study can be synthesized into a Regional Government policy on parking management. Conceptually, public policy functions as a tool used by the government to resolve various social problems through a rational, planned, and systematic decision-making process (Dye & Dye, 1972). In the context of parking management in educational environments, local government policy can be categorized as part of a public service policy as well as an urban transportation management strategy that aims to create order and spatial efficiency. According to the policy implementation theory put forward by Edward III, the success of a policy is highly dependent on four main aspects, namely communication effectiveness, resource availability, the attitude or commitment of implementers (disposition), and a supportive bureaucratic structure (Edwards III, 1980).

The governance theory approach provides the perspective that parking management in educational areas requires collaboration between the government, educational institutions, and the

community. In this perspective, parking policy is not merely viewed as a formal legal product, but also as the result of a collaborative process between stakeholders aimed at realizing the public interest, spatial efficiency, and environmental sustainability (Ansell & Gash, 2008).

The governance theory approach provides a profound theoretical and practical perspective that the parking management system in educational areas can no longer be resolved through a one-way (top-down) approach by a single authority. Instead, this theory emphasizes that parking arrangements around schools and campuses must be positioned as a dynamic, inclusive, and equal collaboration space between three main pillars: the local government, the educational institution itself, and the wider community, including parents, local businesses, and parking managers. Within the scope of governance, parking policies should not be viewed solely as a rigid product of formal law or written regulations imposed from above. These policies must be understood as a living consensus born from an intense dialectical and collaborative process among stakeholders, in which each party has a balanced role, responsibility, and sense of ownership towards environmental order (Emerson et al., 2012).

Through this collaborative lens, the formulation and execution of parking policies are driven by a broader value orientation, namely realizing equitable public interests, optimizing efficient urban spatial planning, and maintaining environmental sustainability. When the government acts as an accommodating regulator, schools or universities as internal facilitators, and the community as active oversight partners, potential social friction in the field can be mitigated early (Bryson et al., 2015)**.**

This approach shifts the old transactional paradigm to participatory governance. The end result is not only a drastic reduction in traffic congestion around school gates or the elimination of illegal levies, but also the creation of a smart, safe, and orderly system for utilizing shared space. At a macro level, the successful application of governance theory in the parking sector will set a positive precedent for the management of other public facilities, while also demonstrating that the integration of academic interests, the local economy, and urban planning can proceed side by side without compromising each other (Torfing et al., 2012).

Furthermore, the theory of policy decentralization Rondinelli & Cheema emphasizes that local governments have the authority to regulate local affairs, including parking management as a source of Regional Original Income (PAD) (Rondinelli & Cheema, 1983). However, in practice, regional autonomy often faces obstacles in the form of mismatches between national policy directions and specific conditions at the local level. Therefore, every policy adopted must consider the local social, economic, and institutional context for effective and relevant implementation. This research produces findings and a conceptual framework that provide new perspectives and a more in-depth analysis compared to previous studies on local government policies in parking management.

Conclusion

The research results show that the Cilegon City regional government's policy on parking management in educational environments still faces various obstacles, particularly in regulatory, institutional, and social awareness aspects. Although the local government has a legal basis governing parking fees and management, its implementation has not been optimal due to weak coordination between relevant agencies, limited supporting facilities, and low discipline among school residents in complying with applicable parking regulations. Furthermore, parking management in educational areas tends to be oriented towards increasing local revenue (PAD), while its primary function as a means of public service and spatial planning control has not been fully realized.

To create an orderly, safe, and sustainable parking system, a policy is needed that is contextual and adaptive to the characteristics of the educational environment, through strengthening regulations, increasing school community participation, implementing digital technology (e-parking), and integration with urban transportation policies. Therefore, the direction of parking management policy in educational environments in Cilegon City should be based on the principles of good governance, which emphasize transparency, accountability, and collaboration among stakeholders. This approach is expected to produce parking management that not only serves as a source of local revenue but also supports the creation of order, safety, and comfort in educational activities.

References

Agyeman, J., & Evans, B. (2004). Just Sustainability: The Emerging Discourse of Environmental Justice in Britain? *The Geographical Journal*, *170*(2), 155–164. https://doi.org/10.1111/j.0016-7398.2004.00117.x

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, *18*(4), 543–571. https://doi.org/10.1093/jopart/mum032

Banister, D. (2008). The Sustainable Mobility Paradigm. *Transport Policy*, *15*(2), 73–80. https://doi.org/10.1016/j.tranpol.2007.10.005

Barter, P. A. (2015). A Parking Policy Typology for Dense and Motorising Cities. *Research in Transportation Economics*, *52*, 3–12. https://doi.org/10.1016/j.retrec.2015.10.005

Behr, A., & Theune, K. (2017). Health System Efficiency: A Fragmented Picture Based on OECD Data. *PharmacoEconomics - Open*, *1*(3), 203–221. https://doi.org/10.1007/s41669-017-0010-y

Berkowitz, M. W., & Bier, M. C. (2005). *What works in character education: A research-driven guide for educators*. Washington, DC: Character Education Partnership.

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2015). Designing and Implementing Cross-Sector Collaborations: Needed and Challenging. *Public Administration Review*, *75*(5), 647–663. https://doi.org/10.1111/puar.12432

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

de Vries, H., Bekkers, V., & Tummers, L. (2016). Innovation in the Public Sector: A Systematic Review and Future Research Agenda. *Public Administration*, *94*(1), 146–166. https://doi.org/10.1111/padm.12209

Dye, T. R., & Dye, T. R. (1972). *Understanding public policy* (Vol. 1). Prentice-Hall Englewood Cliffs, NJ.

Edwards III, G. C. (1980). Implementing Public Policy, Congress Conel Quarterly Press. *Washington DC*.

Emerson, K., & Nabatchi, T. (2015). Evaluating the Productivity of Collaborative Governance Regimes: A Performance Matrix. *Public Performance \& Management Review*, *38*(4), 717–747. https://doi.org/10.1080/15309576.2015.1031016

Emerson, K., Nabatchi, T., & Balogh, S. (2012). An Integrative Framework for Collaborative Governance. *Journal of Public Administration Research and Theory*, *22*(1), 1–29. https://doi.org/10.1093/jopart/mur011

Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2018). Digital Government and Public Management Research: Finding the Crossroads. *Public Management Review*, *20*(5), 633–646. https://doi.org/10.1080/14719037.2017.1327181

Grimmelikhuijsen, S. G., Porumbescu, G., Hong, B., & Im, T. (2013). The Effect of Transparency on Trust in Government: A Cross-National Comparative Experiment. *Public Administration Review*, *73*(4), 575–586. https://doi.org/10.1111/puar.12047

Gurusi, L., Mansyah, M. S., & Supriyanto, S. (2025). Kebijakan Hukum Pengelolaan Parkir dan Peluang Penerapan E-Parkir: Solusi Mendongkrak Pendapatan Daerah [Parking Management Legal Policy and Opportunities for Implementing E-Parking: A Solution to Boost Regional Revenue]. *Jurnal USM Law Review*, *8*(1), 254–269.

Hill, M., & Hupe, P. (2009). *Implementing Public Policy: An Introduction to the Study of Operational Governance*. SAGE Publications.

Howlett, M., & Rayner, J. (2007). Design Principles for Policy Mixes: Cohesion and Coherence in "New Governance Arrangements." *Policy and Society*, *26*(4), 1–18. https://doi.org/10.1016/S1449-4035(07)70118-2

Irvan, D. P., Fernanda, S., & Adji, S. M. (2024). Analisis Implementasi Peraturan Daerah Kota Yogyakarta No. 2 Tahun 2019 Tentang Perparkiran [Analysis of the Implementation of Yogyakarta City Regional Regulation No. 2 of 2019 Concerning Parking]. *BIROKRASI Учредители: Politeknik Pratama Purwokerto*, *2*(3), 345–365.

Janssen, M., & Estevez, E. (2013). Lean Government and Platform-Based Governance—Doing More with Less. *Government Information Quarterly*, *30*, S1--S8. https://doi.org/10.1016/j.giq.2012.11.003

Kitchin, R. (2014). *The data revolution: Big data, open data, data infrastructures and their consequences*. SAGE Publications.

Litman, T. (2020). *Parking Management: Strategies, Evaluation and Planning*. Victoria Transport Policy Institute. https://www.vtpi.org/park_man.pdf

Marsden, G. (2006). The Evidence Base for Parking Policies—A Review. *Transport Policy*, *13*(6), 447–457. https://doi.org/10.1016/j.tranpol.2006.05.009

Meijer, A. (2015). Government Transparency in Historical Perspective: From the Ancient Regime to Open Data in the Netherlands. *International Journal of Public Administration*, *38*(3), 189–199. https://doi.org/10.1080/01900692.2014.934837

Meijer, A., & Bolívar, M. P. R. (2016). Governing the Smart City: A Review of the Literature on Smart Urban Governance. *International Review of Administrative Sciences*, *82*(2), 392–408. https://doi.org/10.1177/0020852314564308

Mergel, I., Edelmann, N., & Haug, N. (2019). Defining Digital Transformation: Results from Expert Interviews. *Government Information Quarterly*, *36*(4), 101385. https://doi.org/10.1016/j.giq.2019.06.002

Moyson, S., Scholten, P., & Weible, C. M. (2017). Policy Learning and Policy Change: Theorizing Their Relations From Different Perspectives. *Policy and Society*, *36*(2), 161–177. https://doi.org/10.1080/14494035.2017.1331879

Newman, P., & Kenworthy, J. (1999). *Sustainability and Cities: Overcoming Automobile Dependence*. Island Press.

O'Toole, L. J. (2015). Networks and Networking: The Public Administrative Agendas. *Public Administration Review*, *75*(3), 361–371. https://doi.org/10.1111/puar.12321

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action.* Cambridge university press.

Parkir, F. (n.d.). *Buku*.

Peters, T. D. (2018). Corporations, sovereignty and the religion of neoliberalism. *Law and Critique*, *29*(3), 271–292.

Pierce, G., & Shoup, D. (2013). Getting the Prices Right: An Evaluation of Pricing Parking by Demand in San Francisco. *Journal of the American Planning Association*, *79*(1), 67–81. https://doi.org/10.1080/01944363.2013.787307

Ramdhan, M. R., Ismail, I., & Pananrangi, A. R. (2024). Implementasi Kebijakan Penyelenggaraan Retribusi Parkir dalam Perspektif Good Governance di Kabupaten Sinjai [Implementation of Parking Retribution Management Policy from a Good Governance Perspective in Sinjai Regency]. *Paradigma Journal of Administration*, *2*(2), 47–53.

Rondinelli, D. A., & Cheema, G. S. (1983). *Decentralization and development: Policy implementation in developing countries*. Sage Beverly Hills.

Shoup, D. C. (2005). *The High Cost of Free Parking*. Planners Press.

Stone, G. R., Seidman, L. M., Sunstein, C. R., Tushnet, M. V, Karlan, P. S., Huq, A., & Litman, L. M. (2023). *Constitutional Law:[Connected EBook with Study Center]*. Aspen Publishing.

Subarsono, A. G. (2012). *Analisis kebijakan publik: konsep, teori dan aplikasi [Public policy analysis: concepts, theories and applications]*. https://doi.org/[in indonesian]

Togala, R., Arsalim, A., & Parisu, C. Z. L. (2025). Smart Governance: Integrasi Teknologi dan Teori Pemerintahan dalam Pelayanan Publik [Smart Governance: Integration of Technology and Governance Theory in Public Services]. *Innovative: Journal Of Social Science Research*, *5*(2), 4116–4123.

Torfing, J., Peters, B. G., Pierre, J., & Sørensen, E. (2012). Interactive Governance: Advancing the Paradigm. *Oxford University Press*. https://doi.org/10.1093/acprof:oso/9780199596753.001.0001

Wahab, F. (2025). Pemodelan Sistem Parkir Ramah Lingkungan (Green Parking) Berkelanjutan Terhadap Pengendalian Emisi Karbon Monoksida (CO)(Studi Kasus: Kampus Universitas Gorontalo) [Modeling a Sustainable Green Parking System for Controlling Carbon Monoxide (CO) Emissions. *Journal of Multi Technology (J-Multitechno)*, *1*(2), 108–122.

Winter, S. C. (2012). Implementation Perspectives: Status and Reconsideration. *Handbook of Public Administration*. https://doi.org/10.4135/9781446200508.n31