

1-31-2024

Assessment of Potential Area in Jakarta Capital City Based on Land Performance Weighting

Ika Rosantiningsih
Universitas Indonesia, ikarose.architect@gmail.com

Chotib Hasan
Universitas Indonesia, chotib.m@ui.ac.id

Follow this and additional works at: <https://scholarhub.ui.ac.id/jsgs>



Part of the [Growth and Development Commons](#), [Urban, Community and Regional Planning Commons](#), and the [Urban Studies and Planning Commons](#)

Recommended Citation

Rosantiningsih, Ika and Hasan, Chotib (2024) "Assessment of Potential Area in Jakarta Capital City Based on Land Performance Weighting," *Journal of Strategic and Global Studies*: Vol. 7: No. 1, Article 4.

DOI: [10.7454/jsgs.v7i1.1138](https://doi.org/10.7454/jsgs.v7i1.1138)

Available at: <https://scholarhub.ui.ac.id/jsgs/vol7/iss1/4>

This Article is brought to you for free and open access by the School of Strategic and Global Studies at UI Scholars Hub. It has been accepted for inclusion in *Journal of Strategic and Global Studies* by an authorized editor of UI Scholars Hub.

Assessment of Potential Area in Jakarta Capital City Based on Land Performance Weighting

Cover Page Footnote

Thank you to institutions, urban planning associations, entrepreneurs and academics who helped smooth the process of data collection, interviews and questionnaires.

Assessment of Potential Area in Jakarta Capital City Based on Land Performance Weighting

Ika Rosantiningih^{1*}, Chotib²

¹ Urban Studies, School of Strategic and Global Studies, Universitas Indonesia, Jakarta, Indonesia

² Urban Studies, School of Strategic and Global Studies, Universitas Indonesia, Jakarta, Indonesia

ABSTRACT

Law of the Republic of Indonesia No. 3 of 2022 concerning the National Capital has a major impact on Jakarta, challenges for Jakarta to response the relocation of the capital. Jakarta strives to become a Global City by increasing investment, various efforts are made for increasing and economic stabilitation, in line with the sustainable development goals, "Decent Work and Economic Growth". Investment is closely related to spatial planning. Jakarta publish Governor Regulation No. 31 of 2022 concerning the Spatial Planning Detailed, that have using performance assessment with infrastructure services (transportation, road, and public infrastructure factors) weighting, but limited to use in trade and service zones, has not been applied to all subzones. To capture wider investment potency, performance assessment using land-based weighting is needed such as: Land use and planning; Property Right and Value, and Land Safety. The research aims to obtain weights that can be used in performance assessment to be applied to an area in determining the potential value of the area from the land aspect. The method used uses a mixed method in the form of interviews, then the use of Analytical Hierarchi Process (AHP) in the form of questionnaires with informants and respondents from various stakeholders such as central and local governments, representatives of urban planner associations, developers from various sectors, and academics, followed by data processing in Expert Choice. The results of weighting land-based performance assessments as a quick assessment in determining the potential of the area for investment development and priorities in infrastructure development.

Keywords: Assessment of potential area; Land Performance Weighting; Analytical Hierarchi Process

1. Introduction

The Special Capital Region of Jakarta is a province that has been the capital of the Republic of Indonesia for decades, although the capital of the country has moved several times but returned to Jakarta (Kahar et al., 2023). Jakarta has a strategic position as the capital of the country, it is also a primate city, the main city in a country, as the core city in the megapolitan area in accordance with the Presidential Regulation of the Republic of Indonesia No. 60 of 2020 concerning the Spatial Detailed Planning of the Urban Areas of Jakarta, Bogor, Depok, Tangerang, Bekasi, Puncak, and Cianjur (Jabodetabekpunjur). Jakarta's strategic position is

* Corresponding author: Ika Rosantiningih

E-mail: ikarose.architect@gmail.com

Affiliation: Urban Studies, SKSG, Universitas Indonesia

also as a trade center (20% of the gross domestic product of the trade sector), a financial services center (45% of the gross domestic product of the financial services sector), a corporate service center (68% of the gross domestic product of the corporate service sector), an administrative and government center (49% of the gross domestic product of the sector concerned), an education service center (27% of the gross domestic product of the education service sector), Processing Industry Center (10% of Gross Domestic Product of the Processing Sector) (Kunjana, 2019).

However, the issuance of Law of the Republic of Indonesia No. 3 of 2022 concerning the national capital has a major impact on the Special Capital of Jakarta. When Jakarta is no longer the capital, it is feared that regional sources of income will decline with many business people and economic activities switching to the State Capital (IKN) so that economic growth and regional income achievements will decrease (Kahar et al., 2023), so that the Provincial Government of Jakarta Capital City seeks to maintain its strategic position by issuing Governor Regulation No. 31 of 2022 concerning the Spatial Planning Detailed of the Provincial Planning of the Special Capital Region of Jakarta as one of the efforts to improve the investment climate and realize Jakarta as a global business and economic center, aiming to keep the economy of Jakarta stable and increasing, in line with one of the 8th SDG's goals of "Decent Work and Economic Growth" to improve the welfare of cities and city dwellers.

The government is obliged to provide a conducive investment and regulatory climate (Soegijoko, 2011). The investment climate can be improved by maximizing the potential of the region. In obtaining the potential of the area, a quick study is needed before making an in-depth study. Performance assessment methods for an area can be done to obtain fast results. Currently, performance assessment has been applied to Governor Regulation No. 31 of 2022 but is still limited to adding the intensity value of the building floor coefficient (KLB) in trade and service zones (subzones K-1, K-2, K-3), because these zones are the most flexible to carry out various residential and non-residential activities as well as commercial and non-commercial, especially for trade and service sector activities which are one of the largest contributors to investment receipts in state and foreign affairs Jakarta Capital City. The performance calculation in the Governor's Regulation uses the weighting of infrastructure services in the form of transportation factors, road factors, and public infrastructure facilities (SPU), based on the availability of existing infrastructure services so that areas that have not been served by adequate infrastructure will get a small value.

Due to the limitations of the Governor's Regulation, a performance assessment is needed using factors that are more general and can be applied to various areas in Jakarta. These general factors can be seen from several aspects such as spatial aspects, land aspects, environmental aspects of a land. Based on the literature review, several factors and criteria were obtained that can be used as a land-oriented performance assessment, including: 1) Land use and planning (with criteria for suitability of land use to zoning plans, as well as land availability); 2) Property right and value (with criteria of certainty and clarity of land rights; and land prices); 3) Land safety (with criteria of being safe from disasters such as floods, fires, land subsidence, and safe flight trajectories).

The purpose of this study is to obtain the weighting used in performance assessment to be applied to an area to obtain the potential value of the area from the land aspect. If an area has potential, infrastructure can be developed, regional arrangement, so that with the availability of adequate infrastructure, smooth mobility, connectivity will attract domestic and foreign investors to invest in the potential area. Domestic investment and foreign investment play a role in economic growth (Nadzir & Setyaningrum Kenda, 2023). Good access in urban transportation encourages industrial and service development, directly affecting the development of the economy as a whole (Koestoer, 2007).

2. Literature Review

2.1. Literature Review

In the central place theory proposed by Walter Christaller in 1933 was explained that the city is the center for the surrounding area as a trade link with other regions (Rutz, 1987). The city center is present to serve various services, the city is a productive regional center (Koestoer, 2011). In the development of metropolitan cities in Indonesia, the top is occupied by Jakarta as a metropolis followed by other regional metropolis groups such as Surabaya, Medan, Ujung Pandang, Semarang, Bandung and Palembang (Rutz, 1987). A metropolitan city is a city with a population of more than one million inhabitants (Soegijoko, 2011). Jakarta as the largest and metropolitan city in Indonesia is experiencing very rapid development and has land use that is of economic value (Koestoer, 2011).

According to Freeman in (Koestoer, 2011) explained that the city contains four main things, namely 1) Provide trade facilities for residents; 2) Provide business land for residents; 3) Open the possibility of the emergence of service businesses; 4) Have industrial activities.

These four things make the city attractive as a place of activity for locals and migrants. The development of a region is influenced by several factors such as: a) Economic activity; b) Facilities available in activities; c) Its natural resources; d) Human (Koestoer, 2011).

In urban development policy, it is directed to spread spatial and temporal concentration by building multi centers that have uniqueness or distinctiveness, minimize the need for movement by realizing zero transportation city through the construction of compact / highrise buildings as well as mixed land-use and mixed groups. In urban development, sustainability is also needed such as sustainable economically, sustainable socially, sustainable politically, sustainable culturally, sustainable environmentally characterized by several characteristics such as compact and green, multi-centers, mixed land-uses, mixed groups, etc (Soegijoko, 2011). For this reason, it is necessary to create areas that can be used as compact areas and transit-oriented areas, where the selection can use a performance assessment approach.

In the book urban economics, it is explained that economic growth will increase per capita income by obtaining sources of economic growth from: 1) capital deepening; 2) Increasing human resources; 3) Economic improvement; 4) Economic Agglomeration (Sullivan, 2011). The competition of the current era of global competition has required the city to be able to act as a place of competitive and international standard activities such as attractive for investment, attractive to visit, have international standard hotel and convention facilities, have entertainment facilities and visual beauty, safe and comfortable to visit and live in, and encourage city people to increase productivity and creativity in encouraging local economic development (Soegijoko, 2011).

Government policy support for markets and licensing, a conducive investment climate, political stability, disaster security are needed to support investment. In the analysis of urban economics, it is closely related to land use in the form of involving spatial factors in the analysis. In addition, the nature of the business is influenced by the surrounding conditions, the location of the land and the physical condition of the land plays an important role as an investor consideration in investing (Abdul Atheem, 1995).

In a study entitled "How do floods affect the economy? an empirical analysis using Japanese flood data" shows a close correlation between the impact of natural disasters, in this case floods and economic activities both direct and indirect effects, where floods have a negative effect on the GDP of the prefecture where the disaster occurred. The impact of natural

disasters on the economy lasts in the short, medium to long term, and there are positive and negative impacts. In relation to short-term negative impacts, natural disasters reduce productivity due to damage to public infrastructure, damage to capital stock and supply chains. While in the medium and long term, natural disasters have an impact on investors (business actors) who will migrate and invest in other areas to anticipate future disasters (Ashizawa et al., 2022).

In the Indonesian context, there is a study entitled the increase in estimated economic losses due to floods affected by land subsidence in Jakarta, where the results show that in a span of 10 years, between 2007 to 2027, it is predicted that there will be an additional economic loss of 15 trillion, originally from the value of losses of 21 trillion to 36 trillion in 2027 caused by land subsidence resulting in floods (Yuhanafia & Andreas, 2017). While in other disasters such as fires, there are parameters to determine the level of danger, namely land use and building density (Muzani, 2020). Fires can cause losses such as casualties, materials in the form of damaged building values and assets, the environment such as the thermal effects of fires and increased CO₂ gas and pollution, economic in the form of financial losses to businesses, and social in the form of layoffs due to business bankruptcy (Damkar, 2020).

In another study explaining the regulation of the flight operational safety area (KKOP), it was explained that the airspace around the airport must be free from all forms of obstacles that can interfere with the movement of aircraft in the form of setting certain height limits on objects around the airport. In the aviation operational safety area (KKOP) it is not allowed to build buildings or objects that grow permanen nor movable (mobile), with a height higher than the height limit set because it will endanger flight safety and can hamper the speed of economic development of the region concerned (Winaya & A.L.W, 2016).

2.2. Previous Studies

Performance assessment has been applied in several countries such as the United States, Australia and New Zealand as well as countries in Great Britain as explained in a study entitled "Performance-based planning: perspectives from the United States, Australia, and New Zealand", where in this journal evaluates the application of performance-based spatial planning in the 3 countries related to how it started, constraints, what factors / parameters are used as weighting, and how it continues to date. Performance-based land use regulation is increasingly being applied to the public sector as a means to improve the efficiency and

ineffectiveness of decision-making. If performance-based approaches continue to be used, it will be necessary to better understand the administrative implications and implementation of these types of land use regulations (Baker et al., 2006).

Exner and Sawchuk explain in (Nur Fadhilah, 2020) that performance-based spatial use regulations are rapidly increasing for use in the public sector with the aim of improving the efficiency and effectiveness of decision-making in controlling land use, building regulations, and natural resource planning. Performance-based regulations are built on the assumption that land use impacts are a function of intensity or physical characteristics and functions rather than specific land uses such as commercial and residential that allow integration of land use as long as performance criteria are met. Performance appraisals are intended to make regulations more flexible, require fewer regulations, speed up the approval process, and encourage greater discussion among policymakers (Kendig, 1980; Porter et al., 1988).

Other studies related to this research such as related to the mutual effects of land distribution with economic development: evidence from Asia, Africa and Latin America, discusses the historical picture of land distribution and the main theories of economic development. There is a relationship between land distribution and key elements of economic development, providing the latest empirical comparative review of the characteristics, limitations, and potential influences of land distribution and economic development arrangements in developing countries around the world. Land allocation and poor administration will add huge costs to the business. This study shows the influence of topography, geomorphology, and financial factors (opportunities, boundaries, resource access) on land-based income and land use (Azadi & Vanhaute, 2019)

3. Research Methodology

The research method used is in the form of mixed methods, combining qualitative methods in the form of in-depth interviews with quantitative methods with the acquisition of questionnaire results using the Analytical Hierarchy Process (AHP) because it simplifies various factors and criteria that are many less and based on a priority scale. The combination of quantitative and qualitative methods will result in a deeper understanding of the object under study (Brannen, 1992). The initial step of this research is to conduct a literature review of various theories and studies on the close relationship between investment and Land use and Planning, Property Rights and Value, and Land Safety factors, then validate the results of

a literature review of some of these factors and criteria by obtaining consideration from various experts and stakeholders who can provide decision assessments based on priority scales. where consideration from various experts is required.

The resource persons and respondents in this study are economic actors. Economic actors in an economy consist of many groups, including households, communities, companies, and governments, each of which has a role in economic activities (Shaid & Pratma, 2022). In this study, interviews and questionnaires were distributed to 4 (four) stakeholder groups who have different and important roles in decision making in various fields such as:

- 1) Government: central and local governments (Ministry of Agrarian and Spatial Planning / National Land Agency, Regional Office of the National Land Agency of the Special Capital City of Jakarta, Investment Office and One-Stop Integrated Services of the Special Capital City of Jakarta, Provincial Land and Spatial Planning Office of the Special Capital City of Jakarta, Provincial Revenue Agency of the Special Capital City of Jakarta, Bureau of Development and Environment of the Regional Secretariat of the Special Capital City of Jakarta);
- 2) Professional associations (Indonesian Institute of Architects (IAI), Indonesian Planning Experts Association (IAP), Indonesian Urban Design Experts Association (IARKI));
- 3) Business actors from various different business fields consist of 4 different company group, who are also members of one or several Employers' Associations such as Chamber of Commerce and Industry (KADIN), Real Estate Indonesia (REI), Indonesian Young Entrepreneurs Association (HIPMI), Indonesian Shopping Center Management Association (APPBI);
- 4) Academics from various disciplines such as from the School of Environmental Sciences, University of Indonesia and the Department of Geography, Faculty of Mathematics and Natural Sciences, University of Indonesia. All of these speakers have a role in policies, experiences, and opinions related to investment and spatial planning from various points of view, so that consideration from various points of view can provide maximum results in determining the scale of interest.

The results of the interview were conducted to validate the importance of factor: 1) Land use and planning (with criteria for suitability of land use with zoning plans, as well as land availability); 2) Property right and value (with criteria of certainty and clarity of land rights;

and land values based on land value zones); 3) Land safety (with criteria for safe from disasters such as flooding, land subsidence, and safe flight trajectory / KKOP) for investment.

This validation becomes a reference for making questionnaires that apply the Analytical Hierarchy Process (AHP) using paired comparison scales that compare between factors and between criteria in a factor. Analytical Hierarchy Process (AHP) is used in decision making that has many criteria, resource allocation, planning and prioritization of each strategy owned by stakeholders. The application of the Analytical Hierarchy Process (AHP) method prioritizes the quality of data from respondents, so it does not depend on the quantity (Saaty, 2001).

Factor	Scale																Factor	
	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8		9
A																		B

Table 1. Paired Appeal Scale

Source: (Saaty, 1990)

In the questionnaire, a classification of importance scales is made which is explained in the table below:

Table 2. Scale of Importance in the AHP Process

Priority Scale	Definition	Priority Scale	Definition
1	Equal importance	6	Strong plus
2	Weak or slight	7	Very strong importance
3	Moderate importance	8	Very, very strong
4	Moderate plus	9	Extreme importance
5	Strong importance		

Source: (Saaty, 1990)

Informants and respondents can use purposive sampling so that respondents are limited to a minimum of two respondents, taking into account the understanding of giving answers to the questionnaires given, these respondents are competent experts and experts in their fields. A total of 15 respondents were also interviewees during in-depth interviews. The results of measuring the importance scale of the questionnaire are processed using Expert Choice 11 software so that the results of priority comparisons between factors and between criteria in one factor are obtained, as well as comparisons between all criteria. The results of data processing can be declared valid / consistent if the value of Consistency Ratio (CR) or inconsistency value is equal to or less than 0.1 (≤ 0.10), If the results exceed the value of 0.1 (≤ 0.10) then it is necessary to fill out a re-questionnaire until inconsistency is obtained ≤ 0.10 , after that a combined assessment of factors and criteria is carried out (Dwiputra, 2021).

4. Result

At the interview stage, it was obtained that factor (1) Land use and planning (with criteria for suitability of land use with zoning plans, as well as land availability); (2) Property right and value (with criteria of certainty and clarity of land rights; and land values based on land value zones); (3) Land safety (with criteria for safety from disasters such as flooding, land subsidence, and safe flight trajectory / flight operational safety area) is a component that taken into account in investment both in terms of consideration before starting investment to when it has been operational. All speakers agreed that in using land in accordance with the city spatial plan, the existence of available land will make it easier for investors to find a business location, the existence of legal guarantees and certainty of land ownership is the most important aspect in the consideration of finding a business location, as well as the price of land that the cheaper the price of land and close to the intended market share is a consideration before investing, As well as business locations that are in a safe environment from various vulnerabilities of floods, fires, land subsidence also become more value in choosing a business location, and finally land that is safe from the flight trajectory will provide added value from aspects of development that are not constrained by height restrictions.

In addition to validating the importance between factors and criteria in a factor, several additional inputs were found that also play a role in investment such as accessibility and connectivity factors which also play an important role in investment proposed by government

agencies, business actors and academics. Connectivity is closely related to accessibility, where this connectivity will integrate various accesses such as road networks and transportation. It was stated by several business actors and government agencies that as a consideration for starting a business, investors will need ease of access to transportation, road network connectivity, comparing production time for a year with the investment value invested, travel time related to worker productivity and speed of distribution of goods and / or services during operation. The results of interviews with professional associations and academics found that urban planning by creating activity nodes in the form of compact areas or transit-oriented areas will encourage greater investment due to integrated spatial planning policies, urban space efficiency, the use of mixed use, which is integrated with various modes of transportation for ease of access.

The results of the interview became the basis for compiling questionnaires using a paired appeal scale in order to determine priorities over one another. The parameters used in the assessment of the Analytical Hierarchy Process are :

- 1) Factor A : Land use and Planning factors with criterias A1. Land use suitability to the zoning plan, assuming the activities to be carried out are allowed by zoning on the land; A2. The availability of land as investment capital / land assets, assuming land that has not been developed - still in the form of vacant land is more flexible than land that has been built.
- 2) Factor B: Property rights and Value factors with criterias B1. Clarity and Certainty of the basis of rights (already / not yet certified on a land), assuming land that has been certified and clearly the owner is more in demand than land that has not been certified; B2. Price - Land value based on Land value zone assuming Cheaper/affordable land prices are more in demand than land with more expensive land prices.
- 3) Factor C: Land Safety factor with criterias C1. Aviation operational safety area which a safe area of the flight trajectory, assuming that if a land is within a safe radius / far from the flight trajectory, it is more desirable because in building the height of the building is not constrained by the height limit of the flight operational height area (KKOP); C2. Disasters in the form of being safe from flood vulnerability, assuming a land with a land location and road access that is safe from flooding is more desirable than land with land locations and road access that are prone to / frequent flooding; C3.

Disasters in the form of safe from the frequency of fire events, assuming a land located in a village area that is rarely / little frequency of fire disasters per year is more in demand than land in a village area that is prone / frequent / more frequency of fire events per year; C4. Safe from land subsidence, assuming a land that is in an area where there is no land subsidence / or minimum land subsidence is more desirable than land that is in an area prone to land subsidence

The questionnaire was conducted on 15 respondents from 4 stakeholder groups who were competent experts and experts in their respective fields. These four stakeholder groups are considered to represent interest determination in the selection of priorities between factors that play a role in investment. The questionnaire uses a paired appeal scale that compares importance between factors and criteria. The results of the questionnaire continued data processing on Expert Choice 11 with an inconsistency rate (IR) limit of < 0.1 (10%). Several times questionnaire adjustments were made with respondents to obtain consistent results so that the IR value < 0.1.

The results obtained from data processing from Expert Choice can be seen in the table below:

Table 3. Results of Weight Assessment of All Factors and Criteria

Factor	Expert Choice Processing Results		Overall Total Weight of all criteria	Ranking order of all criteria
Land Use and Planning	0.357	second rank between factors		
	Land Suitability Zoning Plan	Use to 0.401	0.143157	3
	Land Availability	0.599	0.213843	2
Property Rights and Value	0.492	first rank between factors		
	Clarity and Certainty of Land Rights Base	0.801	0.394092	1
	Land Price / Value	0.199	0.097908	4
Land safety	0.151	third rank between factors		
	Safe flight trajectory	0.121	0.018271	8
	Safe from Flooding	0.476	0.071876	5
	Fire Safe	0.191	0.028841	7
	Safe Land Subsidence	0.212	0.032012	6

5. Discussion

The results of data processing in Expert Choice for priority between factors and priorities between criteria in factors obtained the results of ranking results that the most priority factor is the Property Right and Value factor with a value of 49.2%, in second place occupied by the Land Use and Planning factor with a value of 35.7%, while in the last place Land safety factor with a value of 15.1%. When all the criteria of each factor are multiplied by the value of the factor weight and then combined, the following sequence of results is obtained :

Table 4. Ranking order of weighting results

Rank	Criteria	Weight
1 st Rank	B.1 Clarity and Certainty for Rights Base Criteria	39,4 %
2 nd Rank	A.2 Land Availability Criteria	21,4 %
3 rd Rank	A.1 Land Use Suitability for Zoning Plan Criterua	14,3 %
4 th Rank	B.2 Price – Land Value Criteria	9,8 %
5 th Rank	C.2 Safe from Flood Vulnerability Criteria	7,2 %
6 th Rank	C.4 Safe from Land Subsidence Criteria	3,2 %
7 th Rank	C.3 Safe from Fire Vulnerability Criteria	2,9 %
8 th Rank	C.1 Safe from Flight Trajectory (KKOP) Criteria	1,8 %

Sumber : Data process, 2023

The weighting and ranking order obtained from the results of questionnaires and data processing in Expert Choice obtained results with significant differences. Of all the criteria carried out by measuring the priority scale between one another, it turns out that it does not converge on a factor, it shows the importance of a criterion is also influenced by the importance of a factor. Criteria B.1 Clarity and Certainty of Alas Hak obtained the most elections up to 39.4%, followed by criteria A.2 Land Availability at 21.4%, then A.1 Criteria for Land Use suitability to the Zoning Plan, while other criteria only obtained elections below 10%, with the last selection on criteria C.1 Safe from Flight Trajectory (KKOP).

This indicates that in investing, the clarity and certainty of land rights such as the certification of a land is fundamental that determines the potential value of a land, besides that the availability of land in the form of vacant land is also a determining factor in investing, until then the suitability of activities in investing with spatial planning also affects so that spatial

planning policies need to be made more flexible so as to allow various This type of investment is developed in an area.

6. Conclusion

Performance assessment using land-based weighting using factors and criteria 1) Land use and planning (criteria for suitability of land use with zoning plans, as well as land availability); 2) Property right and value (criteria for certainty and clarity of land rights; and land prices based on land value zones); 3) Land safety (criteria for safety from disasters such as flooding, fires occurrence, land subsidence, and safe flight trajectory / KKOP) is general and can be applied in various areas in mainland Jakarta. This performance assessment can be used in conjunction with performance assessment using infrastructure service in Governor Regulation No. 31 of 2022 concerning the Spatial Planning Detailed of the Jakarta Capital City in assessing the potential of an area.

Research in the form of assessing the performance of this area can be an input for local governments in making general spatial planning policies, while specifically this research can be an analysis engine determining the potential value of an area. The limitation of this study is that this weighting can be implemented spatially to obtain a quick assessment using geographic information systems such as the use of ArcGis software and the like, so that spatially the results of the assessment maps of areas can be obtained quickly, which if potential can be developed for investment. Determining priority areas using spatial will be faster to obtain results than manual preparation. In addition, the results of the map acquisition can also be a priority reference in financing infrastructure development. With the infrastructure capital provided by the government, it will be more attractive for domestic and foreign investors to invest in Jakarta.

7. References

- Abdul Atheem, H. (1995). *Economical Feasibility Studies And Project Evaluation*. Al-Nahda Al Misriah Bookshop.
- Ashizawa, T., Sudo, N., & Yamamoto, H. (2022). How Do Floods Affect The Economy? An Empirical Analysis Using Japanese Flood Data.
- Azadi, H., & Vanhaute, E. (2019). Mutual Effects Of Land Distribution And Economic Development: Evidence From Asia, Africa, And Latin America. *Land*, 8(6), 1–15. <https://doi.org/10.3390/Land8060096>
- Baker, D. C., Sipe, N. G., & Gleeson, B. J. (2006). Performance-Based Planning: Perspectives From The United States, Australia, And New Zealand. *Journal Of*

- Planning Education And Research, 25(4), 396–409.
<https://doi.org/10.1177/0739456x05283450>
- Brannen, J. (1992). *Mixing Methods: Qualitative And Quantitative Research*. Routledge. <https://www.routledge.com/Mixing-Methods-Qualitative-And-Quantitative-Research/Brannen/P/Book/9781859721162>
- Damkar. (2020, July 13). *Bahaya Dan Kerugian Kebakaran*. Dinas Pemadam Kebakaran Dan Penyelamatan (Dpkp) Kota Banda Aceh. <https://damkar.bandaacehkota.go.id/2020/07/13/bahaya-dan-kerugian-kebakaran/>
- Dwiputra, R. (2021). Universitas Indonesia [Tesis]. Universitas Indonesia.
- Kahar, M. F., Dewan, A., Daerah, R., Jakarta, P. D. K. I., Lembaga, T., & Nawacita, K. (2023). *Medio September 2023 Disusun Oleh: Bekerjasama Dengan*.
- Kendig, L. (1980). *Performance Zoning (3rd Ed.)*. Planners Press, American Planning Association. https://books.google.co.id/books/about/Performance_Zoning.html?id=Grppaaamaaj&redir_esc=y
- Koestoer, R. . H. (2007). *Perspektif Lingkungan Desa-Kota: Teori Dan Kasus*. Ui-Press. <https://lontar.ui.ac.id/detail?id=20317089>
- Koestoer, R. H. (2011). *Dimensi Keruangan Kota: Teori Dan Kasus* (R. H. Koestoer, R. Tambunan, H. T. Budianto, & Sobirin, Eds.). Ui-Press. <https://lib.ui.ac.id/detail.jsp?id=137903>
- Kunjana, G. (2019, September 1). *Indonesia Perlu Ibu Kota Yang Merepresentasikan Identitas Bangsa*. Investor.Id. <https://investor.id/national/194417/indonesia-perlu-ibu-kota-yang-merepresentasikan-identitas-bangsa>
- Muzani. (2020). *Bencana Kebakaran Permukiman* (A. Y. Wati, Ed.; 1st Ed.). Deepublish Publisher . <http://sipeg.unj.ac.id/repository/upload/buku/buku-monograf.pdf>
- Nadzir, M., & Setyaningrum Kenda, A. (2023). *Investasi Asing Dan Investasi Dalam Negeri: Pengaruhnya Pada Pertumbuhan Ekonomi Di Indonesia*. *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha*, 14, 1. <https://ejournal.undiksha.ac.id/index.php/S1ak/article/view/54408/26314>
- Nur Fadhilah, S. (2020). *Pendekatan Model Dunning Untuk Menganalisis Determinan Di 7 Negara Asean*. <http://lib.unnes.ac.id/39030/1/7111416062.pdf>
- Porter, D. R., Phillips, P. L., & Lassar, T. J. (1988). *Flexible Zoning: How It Works*. Urban Land Institute. https://books.google.co.id/books/about/Flexible_Zoning.html?id=Rhtpaaaamaj&redir_esc=y
- Rutz, W. (1987). *Cities And Towns In Indonesia*. Gebruder Borntraeger.
- Saaty, T. L. (1990). *How To Make A Decision: The Analytic Hierarchy Process*. *European Journal Of Operational Research*, 48(1), 9–26. [https://doi.org/10.1016/0377-2217\(90\)90057-I](https://doi.org/10.1016/0377-2217(90)90057-I)
- Saaty, T. L. (2001). *Fundamentals Of Decision Making And Priority Theory With The Analytic Hierarchy Process (Vol. 6)*. Rws Publications.

- Shaid, N. J., & Pratma, A. M. (2022, October 12). Pelaku Ekonomi : Pengertian, Jenis, Dan Perannya. Money.Kompas.Com. <https://Money.Kompas.Com/Read/2022/01/06/110500726/Pelaku-Ekonomi-Pengertian-Jenis-Dan-Perannya?Page=All>
- Soegijoko, B. T. (2011). Bunga Rampai : Pembangunan Kota Indonesia Dalam Abad 21: Konsep Dan Pendekatan Pembangunan Perkotaan Di Indonesia (G. C. Napitulu & W. Mulyana, Eds.; 2nd Ed.). Urban And Regional Development Institute (Urdu). <https://Lontar.Ui.Ac.Id/Detail?Id=20337825&Lokasi=Lokal>
- Sullivan, A. O. (2011). Urban Economics (8th Ed.). Mcgraw-Hill/Irwin.
- Winaya, I. B. G., & A.L.W, L. T. (2016). Pengaturan Kawasan Keselamatan Operasi Penerbangan : Studi Tentang Pelaksanaan Kewenangan Pemerintah Daerah Dalam Mengendalikan Pembangunan Dan Benda Tumbuh Di Kawasan Keselamatan Operasi Penerbangan Bandar Udara Ahmad Yani Semarang. Law Reform, 12(1), 17. <https://Doi.Org/10.14710/Lr.V12i1.15839>
- Yuhanafia, N., & Andreas, H. (2017). Pertambahan Estimasi Kerugian Ekonomi Akibat Banjir Dengan Pengaruh Penurunan Tanah Di Jakarta. Jurnal Geografi Gea, 17(2), 182. <https://Doi.Org/10.17509/Gea.V17i2.7490>