

Metro Development, Traffic-Oriented Urban Development and Real Estate Value: Evidence from an Emerging Country

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Abstract

This research investigates the influence of metro infrastructure on property values, with a particular emphasis on the mediating role of transit-oriented development (TOD) in a major urban center within an emerging economy. By synthesizing insights from successful global implementations of TOD, the study examines how TOD serves as a catalyst in magnifying the positive externalities of metro systems on adjacent real estate markets. Utilizing a quantitative methodology, the analysis draws on secondary data spanning from 2015 to 2025, focusing on property price dynamics along Metro Line No.1 (Ben Thanh – Suoi Tien) in Ho Chi Minh City—an area undergoing rapid urbanization and facing an urgent demand for modern mass transit solutions. The findings reveal that residential land values tend to appreciate more significantly compared to commercial and mixed-use land. Moreover, the study highlights that substantial enhancements in regional infrastructure—such as transit accessibility, urban connectivity, and public service provision—are strongly correlated with increases in property market values in metro-proximate zones. These results underscore the strategic importance of TOD in leveraging transport investments to drive sustainable urban development and optimize land value capture in rapidly growing cities.

Keywords: Real estate price, TOD, Infrastructure, Land use, Accessibility

1. Introduction

Cervero and Michael (2002b) found that properties near public transit stations in California cost between 6% and 45% more than in areas not nearby. This result reflects the added value brought by convenient transportation access, and shows the importance of the transportation system in shaping the real estate market in developed urban areas (Cervero & Duncan, 2002a). Similarly, in China, land prices near the Metro line increased by an average of 15% - 25% when it was announced and continued to rise higher after the Metro line was completed and put into official operation (Doan et al., 2022). The study shows that the development of public transport infrastructure not only changes the level of access to urban space, but also directly affects market expectations and real estate investment trends, thereby reflecting the close relationship between transport planning and land value in major cities in China.

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The lack of proper coordination between transportation and urban development has caused problems, which can be alleviated by promoting an integrated approach to transportation and urban planning (Thanh, 2022). Public transit-oriented development (TOD) will be the new paradigm for city redevelopment. While the finding of Van (2020) encourages the application of the TOD model to the Metro Line 1 project in Ho Chi Minh City (HCMC). This study also assesses that Metro 1 is an important project for the areas along the line and the city as a whole; and the proposed strategies will be implemented based on the actual context and urban planning, especially the dependence on local conditions.

In recent years, HCMC has been promoting investment in urban transport infrastructure, especially the development of urban railway networks (Metro lines) as a long-term solution to reduce traffic congestion, environmental pollution and towards the goal of sustainable urban development. In fact, HCMC has been implementing the policy of developing public transport and gradually restricting personal traffic under the Project "Strengthening public passenger transport combined with controlling the use of personal motor vehicles participating in traffic in the city" under the HCMC Green Transport Project (Hàng and Dũng, 2024) . In particular, Metro line No. 1 (Ben Thanh – Suoi Tien) is considered a pioneering project and plays a key role in paving the way for the city's urban development model transformation strategy. This Metro line is not only significant in terms of transportation but is also expected to create far-reaching changes in urban space, land use structure and socio-economic development in the areas it passes through.

Along with the formation of Metro Line 1, the real estate market in the vicinity of Metro stations is recording positive fluctuations. However, there is still a lack of studies to clarify the specific impacts of the Metro line on real estate value in Vietnam, especially the indirect impact mechanism through urban planning and infrastructure factors. In this context, the TOD traffic-oriented urban development model has emerged as an integrated approach, closely connecting public transportation and urban spatial planning, with great potential in improving real estate value and urban quality of life. The concept of transit-oriented development (TOD) has undergone a process of development from conceptual origins to practical discovery in various countries, and then applied research. This concept emerged to solve urban problems caused by suburban expansion and dependence on automobiles, especially in the United States from the mid-twentieth century. In the early 1990s, the famous New Urbanism movement emerged (Wang and Xia, 2024)

The concept of TOD officially emerged with the aim of promoting the use of public transport through the planning of high-density, walkable, mixed-use areas within a 600-meter radius of public transport stations. However, due to differing approaches between urban planners and traffic planners, the definition of TOD remains inconsistent. According to Bernick and Cervero (1997), TODs are compact, mixed-use communities organized around transit stations, where surrounding

public spaces serve as the focal point of the neighborhood. This model encourages people to live near transportation corridors in order to reduce dependence on cars. The Maryland Department of Transportation also defines TOD as a design principle for densely populated communities, incorporating residential, employment, commercial, and public service uses (Cervero et al., 2002a). Although there are many different definitions, TOD is aimed at integrating transportation and sustainable urban development. In the US, TOD is focused on solving urban problems, countries such as Europe and Japan focus on land development planning; meanwhile in China, TOD is associated with the rapid development of urban rail transportation, forming a specific TOD-RTC model (Taylor et al., 2019).

Research and analysis of the impact of Metro Line No. 1 on real estate value in HCMC, and at the same time clarified the mediating role of the TOD model in this relationship. This is not only a relatively new approach in Vietnam but also highly applicable, which can contribute to supplementing the theoretical foundation for assessing the impact of transport infrastructure on housing prices and clarifying the potential for developing the TOD model in the context of rapid urbanization and increasingly scarce urban land funds. Our research results are expected to contribute to the development of modern urban planning policies, the development of the real estate market in the direction of efficiency and sustainability, and the optimization of land use in the long term.

Our research focuses on the following objectives: (i) Analysis of changes in real estate values in areas within 0-1000m around Metro station No. 1 before and after information about Metro lines; (ii) Measuring the impact of distance to metro stations on real estate values through regression model and quantitative analysis; (iii) Assess the presence and development of TOD factors (types of land use, transport connectivity, walkability, use of public transport , etc.) in the areas within the scope; (iv) Analyze the relationship between the level of TOD development and the rate of real estate price growth in these areas; and (v) Proposing urban planning and development orientations according to the TOD model to optimize the efficiency of land fund exploitation and sustainable development of the real estate market along the metro line. We focus on the area with a radius of 0 to 1000 meters around the stations of Metro Line No. 1, with a focus on central stations such as Ben Thanh, City Theater, Thao Dien, Thu Duc and Suoi Tien. We collect data for the period from 2015 to 2025, corresponding to the milestones before, during and after the construction of Metro Line 1.

The regression analysis method is used to understand the relationship between observed variables, the impact of factors in the TOD model, Metro line No. 1 to real estate prices along the line. Combining descriptive statistical methods, analyzing population density charts and administrative charts combined with analyzing the impact of price fluctuations, to draw conclusions about the

impact of metro routes on housing prices, through the mediating factors of the TOD model, at the same time, making a judgment on the status of urban construction and development around the station according to the TOD model and appropriate investment policies, in order to optimize the land fund.

Our study contributes to filling the gap related to the relationship between the development of the public transportation system (Metro line No. 1) and the fluctuation of real estate values in the context of urban development according to the TOD model. Through the provision of concrete quantitative evidence, the study sheds light on the impact of TOD factors on land value – a topic that is still of relatively little interest in Vietnam. In addition, the analytical model built from the study not only serves as a theoretical reference framework but can also be applied as a foundation for further studies in the field of sustainable urban planning associated with the development of public transport systems.

We supplement theoretical foundation for determining the added value of real estate from public transport investment, and at the same time contribute to the development of a reasonable land value recovery policy. The study also proposes applicable policy implications for the government and planners in organizing urban space, allocating land use effectively around metro stations to optimize socio-economic benefits. In addition, the practical results are useful for investors in choosing strategic locations according to the trend of sustainable urban development. Finally, the research is the foundation for replicating the TOD model in other metro lines in HCMC and major cities across Vietnam.

2. Literature Review

2.1 Urbanization Concept

Rumencaisop said: "Urbanization is an economic process that destroys the historical opposition - the separation between the city and the countryside and leads to forms of residence that approach the economy most" (An, 2014). Meanwhile, Piaoalop said: "Urbanization is the process of centralization of non-agricultural functions, in-depth investment and diversification, the universalization of production modes and forms of urban residence, the development of exchanges of human types and forms of urban culture" or from the point of view of Hùng (2021) "Although the theories on urbanization are quite consistent on the characteristic signs of an urban population, they are very different between researchers and countries". Therefore, the concept of urbanization in general is still not completely unified with each other, but it is still understood that urbanization is the process of transition from rural society to urban society, reflected in the increase in population and population density in urban areas, the expansion of the scale of urban space, and

the change in the economic, social, cultural and lifestyle structure towards urbanization. In HCMC, urbanization is taking place strongly due to economic growth and migration from rural areas.

2.2 Concept of Public Transportation-Oriented Urban Development Model

TOD is an urban development model that focuses on creating mixed, high-density, walkable residential and commercial areas, and is closely connected to high-quality public transportation systems, such as Metro, bus rapid transit (BRT), or electric trains. The public transportation-oriented urban development model (TOD model) is a strategy to maximize the efficiency of land use, public transportation and environmental protection towards the goal of sustainable development (Hùng, 2025). The goal of this model is to reduce dependence on personal transportation and encourage the use of public transportation in order to create a more vibrant and environmentally sustainable community. In HCMC, urban development according to the TOD model around Metro stations is expected to contribute to solving problems of traffic, pollution and efficient land use, and create modern and livable urban areas.

2.3 Related Theories

2.3.1 Location Theory

Location Theory originated in the field of geography and urban planning, with a foundation formed in the 19th century. One of the founders of this theory was (1783–1850) with his work "The Isolated State" (1826), in which he analyzed the relationship between distance to market and land use in agriculture. Later, Alfred Weber (1868–1958) developed the Industrial Location Theory, which focused on optimizing factory locations to reduce transportation costs. This theory was extended by urban planners such as Walter Christaller with the Central Place Theory, and was integrated into modern urban development models such as Urban Economics or Spatial Analysis (Thisse, 2002)

In this research, we believe that location is a key factor determining real estate value. In fact, convenient public transportation increases value by saving travel costs and increasing access to urban utilities. More research have demonstrated a positive relationship between access to public transport and real estate value (Debrezion et al., 2007). Therefore, Hypothesis H1 is proposed as follows:

H1: The distance to Metro Line 1 has an inverse relationship with the value of real estate in the vicinity, the closer the property is to the Metro line, the higher the value.

2.3.2 Bid – Rent Theory

Bid-Rent Theory was developed by William Alonso in his 1964 book "Location and Land Use" (Alonso, 1964). Based on classical economic theory and the earlier contributions of Johann von Thünen, Alonso modernized the model to apply to the urban context. In this theory, he explains that groups of landusers such as residential, commercial, and industrial will compete to rent land near downtown, as this location reduces travel costs and provides better access to resources. Accordingly, land prices tend to decrease gradually with the distance from the center, and activities that bring high economic value will occupy the most prime locations in urban space.

This theory is also extended to explain how land prices change by distance to major transportation stations, such as the metro line. Empirical studies indicate that land near Metro stations often costs more due to concentrated population density, Abundant urban utilities and convenient access to transportation (Hess and Almeida, 2007; McDonald et al., 1995). And to explain the fact that land prices vary with the distance to the center or major transportation station such as land near Metro stations often cost more due to the concentrated population density, which increases demand. Therefore, the H2 hypothesis is proposed as follows:

H2: Regional population density has a positive effect on real estate value

2.3.3 Theory of Land Value Capture

Land Value Capture (LVC) is a concept in urban economics and public finance, which began to be used in the late 20th century and became popular in the 1990s. This theory was developed and codified by international organizations such as the World Bank (World Bank), UN-Habitat, and prominent scholars such as George E. Peterson. The premise of the theory is that when the State invests in public infrastructure projects such as metro lines or highways, the value of private land around that area will increase due to the benefit of public utilities. Therefore, the State can "recover" part of this added value through financial instruments such as land value added tax, development fees, land auctions or public-private partnership (PPP) models. This mechanism not only helps to reinvest in infrastructure but also contributes to ensuring equity in the distribution of benefits from urban development (Peterson, 2009; Suzuki et al., 2015; Walters and Administration, 2013)

In this research, it is stated that public infrastructure projects increase the value of surrounding private land, thereby creating opportunities for fair recovery of investment capital through financial instruments (taxes, fees, land auctions, etc.). Moreover, the type of land use also plays an important role in determining the level of value increase. Concrete Commercial or mixed-use properties are often valued higher than residential properties only, due to their ability to create

business higher collection and more efficient use of space (Coiacetto and Research, 2001; Mathur and Adam Smith, 2012). Therefore, the final research hypothesis that the team put forward:

H3: The type of land use is a determinant of real estate value (Land with commercial or mixed functions is expected to have a higher value than land used purely for residential purposes)

3. Research Method

Cross-sectional studies use data collected at a time to analyze those variables, and then assess the impact of traffic-oriented urbanization (TOD) factors on land prices without being affected by variables over time. The multivariate linear regression method is used to test research hypotheses, thereby determining the relationship between public transport infrastructure development and land price fluctuations. We chose this technique to serve the goal of predicting the value of real estate under the impacts from the distance to Metro stations, the type of land use, the quality of regional infrastructure and the accessibility of surrounding utilities.

Secondary data is further collected during the period in 2025, allowing analysis of fluctuations in the value of real estate before, during and after the completion of the Metro line. The data was collected mainly from market reports (Savills and CBRE), planning data (HCMC Department of Planning and Architecture). GIS maps and information on real estate prices, land use types, regional infrastructure, distance to the nearest Metro station and the utility accessibility.

The research area is carried out along Metro line No. 1 (Ben Thanh - Suoi Tien) within 0 – 1000 meter from the stations, including the areas around the main stops such as Ben Thanh, City Theater, Thao Dien, Thu Duc and Suoi Tien. These are areas with strong fluctuations in real estate value and urban development density, directly affected by the presence of the Metro line. The selected study sample includes residential and commercial properties located within 1000 meters of the stations, these areas include residential, commercial, shopping malls, most significantly affected by the development of the Metro line and future fluctuations in real estate prices. The observation sample consists of 82 observations of different types of real estate in each area, ensuring an accurate analysis of factors affecting real estate value and the reliability of the results. This study included properties that were evenly distributed between residential and commercial, clarifying differences in the impact of the Metro line on each type of property.

The Model is proposed as follows:

$$Price_per_m^2_{i,t} = \beta_0 + \beta_1 * Distance_to_Metro_{i,t} + \beta_2 * Infrastructure_{i,t} + \beta_3 * Accessibility_{i,t} + \beta_4 * Land_Use_{i,t} + e_{i,t}.$$

Table 1. Definition of Variables

Variables	Meaning	Expected sign	References
Price_per_m ²	The market value of a property at a certain time, reflected in the selling price/m2.		Debrezion et al. (2007), McMillen and McDonald (2004)
Distance_to_Metro	The physical distance to Metro station (in meters or kilometers) from the property to the nearest Metro station.	(-)	Cervero and Duncan (2002) Mohammad et al. (2013_
Infrastructure	Regional infrastructure quality (assessed by points or composite indexes)	(+)	Ahmed and Donovan (1992) McDonald and McMillen (2010)
Accessibility	Easyaccess to utilities (schools, hospitals, shopping malls, metro lines)	(+)	Debrezion et al. (2007), Geurs and Van Wee (2004)
Land_Use	Classify land by function such as residential, commercial, mixed.		Song et al. (2004) Wu et al. (2003)

We carried out multivariate linear regression to test the relationship between traffic-oriented urbanization (TOD) factors and real estate value. We also perform homoscedasticity, multicollinearity, and normality of residuals tests to ensure the reliability of the model and results.

4. Finding and Discussion

The results from Table 2 show that the correlation coefficient R reaches 0.614, reflecting the relatively strong relationship between dependencies and independent variables in the model. The R² determination coefficient reached 0.377, indicating that the model is able to explain 37.7% of the variation in real estate value through independent variables included in the analysis. The corrected R² value reaches 0.344, which represents the suitability of the model after adjustment for the number of variables, which is consistent with the context of the experimental data. Notably, the Durbin-Watson coefficient reached 1,896, which is in the acceptable range (1.5 - 2.5), showing no signs of correlation between the remainders. This ensures that the independent assumption of error in the regression model is satisfied.

Table 2. Impacts of variables on Price_per_m2 (The market value of a property)

Variables	Pred. signed	Coefficient	t-stat
Distance_to_Metro	(-)	-0.011	-1.171
Infrastructure	(+)	46.571	3.366**
Accessibility	(+)	9.08	0.643
Land_Use		53.825	4.017***
Constant		-86.274	-1.864*
R Square		0,614	

This table reports the results of the market value of a property based on the equation:

$Price_per_m2_{i,t} = \beta_0 + \beta_1 * Distance_to_Metro_{i,t} + \beta_2 * Infrastructure_{i,t} + \beta_3 * Accessibility_{i,t} + \beta_4 * Land_Use_{i,t} + e_{i,t}$. The dependent variable is the market value of a property. The explanatory variables are the physical distance to metro station, regional infrastructure quality, easy access to utilities; and the control variable is classify land by function. The definitions for the variables are given in footnotes of Table 2. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

The Coefficients table shows that the variable of land by function has significant impact on the value of a property. This finding refers that along with the Metro line No.1, the residential land has significantly higher than that of commercial and mixed land. Similarly, we also found that

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regional infrastructure quality has a significantly positive impact on the value of a property along the metro.

Table 3. ANOVA

ANOVA MODEL	SUM SQUARES	OF DF	MEAN SQUARE	F	ITSELF.
REGRESSION	273032.908	4	68258.227	11.641	<0.001
RESIDUAL	451481.719	77	5863.399		
TOTAL	724514.627	81			

Dependent Variable: Price_per_m2

Predictors: Distance_to_Metro, Land_Use, Infrastructure, Accessibility

Table 3 shows that the F-value reaches 11.641 with a significance level of Sig. < 0.001, reflecting that the constructed multiple linear regression model is statistically significant and the combination of independent variables has a significant impact on the change in real estate prices. This value in the model is not only suitable but also achieves high reliability in the inspection, contributing to strengthening the hypothesis that TOD-oriented development not only shapes urban space but also has a significant impact on real estate value within the scope of our research.

The adjusted R² reached 0.344, showing that the model explained about 34.4% of real estate price fluctuations from the explanatory variables. Although this coefficient is not too high, it is considered reasonable in the context of field research, when the real estate market is dominated by many different factors. In addition, the variable "type of land use" and "regional infrastructure" are two factors that have a significant impact on real estate prices, while "distance to Metro station" has not shown a clear impact. Evidence from other studies also supports the above claims. Specifically, in Taiwan, Yen et al. (2025) developed a hypothesis that "travel time affects land prices" which has not been accepted, indicating that spatial factors are not strong enough to affect real estate values if they are not accompanied by changes in land use and clear planning orientations. This research also pointed out that the impact of the MRT system in Taipei on real estate prices is uneven between regions, and is only clearly effective in areas with high population density and methodical TOD planning. Similarly, for the case of Jakarta, Indonesia, the expansion of the Metro system does not increase land prices in the areas around the station, unless there is

synchronous integration with factors such as ancillary infrastructure or land use reallocation policies (Hasibuan and Mulyani, 2022).

From there, it can be explained that Metro line No. 1 in Ho Chi Minh City has not had a significant impact on real estate prices, mainly because the new project has been put into operation in a short time, which is not enough to form stable movement behavior and new consumption habits in the residential community. In addition, the TOD-oriented development level of HCMC is still in its infancy in terms of legal framework, detailed planning and specific supporting policies. The lack of integration between public transport development and land use has reduced the spillover effect of the metro to real estate values.

In addition, the auxiliary infrastructure system around the stations is currently lacking in synchronization, typically the absence of parking lots, public spaces, multimedia traffic connections and accompanying utility services. With more than 13 million people living in the sprawling metropolitan area and a high rate of rural-urban migration (estimated at 130,000 people per year), the city is facing serious infrastructure pressure. Urban transportation mainly relies on motorcycles (accounting for 86%), while public transportation only reaches about 5%, showing that the culture of using personal vehicles is still dominant, contributing to congestion and air pollution (Taylor et al., 2019). People who buy or rent houses in HCMC is often interested in the location near workplaces, schools and commercial centers due to the unsynchronized public transportation system and common traffic jams (Pham et al., 2023). In addition, the psychology of preferring real estate near major roads and administrative centers continues playing an important role in dominating the behavior of buying, selling and renting urban real estate. This implies that the benefits from the Metro line have not been reflected in consumers' real estate choice behavior.

Therefore, at the present time, distances such as 0–500m, 500–1000m or over 1000m to the metro station have not shown a statistically significant difference in real estate value. However, theoretically, when Metro Line 1 comes into operation more stably, combined with synchronous supporting infrastructure planning and investment policies, the distance to the station can completely become a determining factor in real estate value – just as the spatial positioning theory and land value theory have predicted.

5. Conclusion

5.1 Recommendations and Policy Implications

The findings show that the distance to the Metro station has not had a significant impact on real estate value, mainly because the project has just been put into operation, the level of development according to the TOD of HCMC is still in its infancy in terms of legal framework, detailed planning

and specific support policies, lack of coordination between public transport development, transport connection infrastructure and land use. In order to maximize the positive impact of Metro Line 1 on real estate value in the future, the construction of a transportation-oriented urban development model (TOD) needs to be comprehensively promoted through institutional reform, synchronous infrastructure investment, etc appropriate financial mechanisms and sustainable development policies.

5.2 Integrated Institutions and Planning according to the TOD Model

According to Taylor et al. (2019), the process of reforming Vietnam's Land Law through the periods from 1988 to 2013 has contributed to expanding land use rights for organizations and individuals and creating conditions for the real estate market to operate more market-oriented. However, the current mechanisms have not yet solved the coordination between land use planning and transport infrastructure development. These authors also pointed out that the lack of synchronization in the master plan has led to spontaneous development around key areas, reducing the efficiency of urban infrastructure investment. Therefore, it is urgent to complete the legal corridor on integrated urban development in the direction of TOD, giving priority to allowing development land multi office around metro stations, promulgate separate planning standards for cluster TOD associated with zoning planning, instead of only integrating into the a general master plan.

5.3 Investment in Integrated Transport Connection Infrastructure

As the inspection explains, the accessibility of utilities and transportation connection infrastructure is still low, making the real estate value not fully reflect the potential of the metro line. The successful TOD model in Asian cities is associated with synchronous investment between public transport routes and passenger transfer points, branch bus systems, and pedestrian infrastructure around stations. Passenger transfer points are not merely places to change routes, but also urban service centers with utilities to support residents to use public transportation more efficiently (Suzuki et al., 2015; Taylor et al., 2019). Therefore, in HCMC, we need to plan multi-functional transfer points at major stations such as Ben Thanh, Thu Duc, Suoi Tien, and at the same time invest in sidewalks, public bicycles, and last-mile bus systems. Take advantage of more available land funds in suburban areas or public land in the inner city to build transit points, avoiding duplicate infrastructure development .

5.4 Social and Environmental Policies

According to Taylor et al. (2019), one of the major challenges in TOD development is the phenomenon of "gentrification" – pushing low-income people out of redevelopment areas due to

rising house prices. The government needs to apply a policy to keep existing residents in the TOD area through financial support or require investors to integrate affordable housing in the project. Meerow et al. (2016) also warns that the TOD model in coastal cities such as HCMC needs to pay special attention to the risk of flooding, especially when many Metro line 1 stations are located in low-lying areas. In addition, TOD should avoid massive development in low-lying areas, prioritize open spaces, have drainage systems and design architecture to adapt to flooding.

This research investigates the influence of metro infrastructure on property values, with a particular emphasis on the mediating role of transit-oriented development (TOD) in a major urban center within an emerging economy. By synthesizing insights from successful global implementations of TOD, the study examines how TOD serves as a catalyst in magnifying the positive externalities of metro systems on adjacent real estate markets. Utilizing a quantitative methodology, the analysis draws on secondary data spanning from 2015 to 2025, focusing on property price dynamics along Metro Line No.1 (Ben Thanh – Suoi Tien) in Ho Chi Minh City—an area undergoing rapid urbanization and facing an urgent demand for modern mass transit solutions. The findings reveal that residential land values tend to appreciate more significantly compared to commercial and mixed-use land. Moreover, the study highlights that substantial enhancements in regional infrastructure—such as transit accessibility, urban connectivity, and public service provision—are strongly correlated with increases in property market values in metro-proximate zones. These results underscore the strategic importance of TOD in leveraging transport investments to drive sustainable urban development and optimize land value capture in rapidly growing cities.

References

- Ahmed, R., & Donovan, C. (1992). Issues of infrastructural development: a synthesis of the literature.
- Alonso, W. (1964). Location and Land Use: Toward a general theory of land rent. *Harvard University Press google schola*, 2, 16-22.
- An, N. Đ. B. (2014). *Tác động của FDI, tự do kinh tế và các yếu tố kinh tế vĩ mô đến tăng trưởng*. Trường Đại học Kinh tế Tp. Hồ Chí Minh,
- Bernick, M., & Cervero, R. (1997). *Transit villages in the 21st century*.
- Cervero, R., & Duncan, M. (2002). Residential self selection and rail commuting: a nested logit analysis.

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Proceedings

ICOI

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- Cervero, R., & Duncan, M. (2002). Transit's value-added effects: Light and commuter rail services and commercial land values. *Transportation research record* 1805(1), 8-15.
- Cervero, R., Ferrell, C., & Murphy, S. (2002). Transit-oriented development and joint development in the United States: A literature review. *TCRP research results digest*, (52).
- Coiacetto, E., & Research. (2001). Diversity in real estate developer behaviour: A case for research. *Urban Policy*, 19(1), 43-59.
- Debrezion, G., Pels, E., & Rietveld, P. (2007). The impact of railway stations on residential and commercial property value: A meta-analysis. *The journal of real estate finance* 35, 161-180.
- Debrezion, G., Pels, E., Rietveld, P., & economics. (2007). The impact of railway stations on residential and commercial property value: A meta-analysis. *The journal of real estate finance*, 35, 161-180.
- Doan, Q. C., Tran, V. T., & Trinh, T. K. T. (2022). Apply GIS, Fuzzy Theory and AHP to Determine Land Value for Land Valuation: A Case Study of Dong Anh District, Hanoi. *VNU Journal of Science: Earth Environmental Sciences* 38(4).
- Geurs, K. T., & Van Wee, B. (2004). Accessibility evaluation of land-use and transport strategies: review and research directions. *Journal of Transport geography* 12(2), 127-140.
- Hằng, N. T. B., & Dũng, N. V. (2024). Giải pháp phát triển điểm trung chuyển hành khách công cộng tại Thành phố Hồ Chí Minh. *Tạp chí Khoa học Giao thông vận tải* 75(3), 1348-1358.
- Hasibuan, H. S., & Mulyani, M. (2022). Transit-oriented development: towards achieving sustainable transport and urban development in jakarta metropolitan, Indonesia. *Sustainability*, 14(9), 5244.
- Hess, D. B., & Almeida, T. M. (2007). Impact of proximity to light rail rapid transit on station-area property values in Buffalo, New York. *Urban studies*, 44(5-6), 1041-1068.
- Hùng, N. H. (2025). Giải pháp công trình kết nối nhà ga đường sắt đô thị với hạ tầng dành cho xe đạp và đi bộ, hướng tới phát triển TOD tại Hà Nội. *Tạp chí điện tử Khoa học và Công nghệ Giao thông*, 102-110.
- Hùng, T. M. (2021). *Đô thị hóa và tăng trưởng kinh tế tại vùng kinh tế trọng điểm phía Nam*. Paper presented at the Proceedings.
- Mathur, S., & Smith, A. (2012). A decision-support framework for using value capture to fund public transit: Lessons from project-specific analyses.

International Conference of Organizational Innovation 2025

Proceedings

ICOI

2025

e-ISSN: 3064-6030
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- McDonald, J. F., & McMillen, D. P. (2010). *Urban economics and real estate: Theory and policy*: John Wiley & Sons.
- McDonald, J. F., Osuji, C. I. J. R. s., & economics, u. (1995). The effect of anticipated transportation improvement on residential land values. *25*(3), 261-278.
- McMillen, D. P., & McDonald, J. (2004). Reaction of house prices to a new rapid transit line: Chicago's midway line, 1983–1999. *Real Estate Economics*, *32*(3), 463-486.
- Meerow, S., Newell, J. P., & Stults, M. (2016). Defining urban resilience: A review. *Landscape and urban planning*, *147*, 38-49.
- Mohammad, S. I., Graham, D. J., Melo, P. C., Anderson, R. J. J. T. R. P. A. P., & Practice. (2013). A meta-analysis of the impact of rail projects on land and property values. *50*, 158-170.
- Peterson, G. E. (2009). *Unlocking land values to finance urban infrastructure* (Vol. 7): World Bank Publications.
- Pham, D. H., Vo, T. H., Le, M. T., & Nguyen, N. D. (2023). Purchase Intention of Apartments in a Metropolitan Area in Vietnam: The Mediating Role of Attitude Toward Behavior. *International Real Estate Review*, *26*(2).
- Song, Y., Knaap, G.-J. J. R. S., & Economics, U. (2004). Measuring the effects of mixed land uses on housing values. *34*(6), 663-680.
- Suzuki, H., Murakami, J., Hong, Y.-H., & Tamayose, B. (2015). *Financing transit-oriented development with land values: Adapting land value capture in developing countries*: World Bank Publications.
- Taylor, R., Nguyen Ba, H., & Nguyen, H. H. (2019). Establishing a Transit-Oriented Development (TOD) Policy for Urban Sustainability in Ho Chi Minh City, Vietnam: A Theoretical Model. *OIDA International Journal of Sustainable Development*, *12*(10), 49-60.
- Thanh, N. B. (2022). *Urban growth in Ho Chi Minh City*. Paper presented at the PROCEEDINGS.
- Thisse, J.-F. (2002). *Economics of agglomeration: cities, industrial location, and regional growth*: Cambridge University Press.
- Van, N. T. C. (2020). Strategies for integrated transport and urban development in Asian developing countries.
- Walters, L. C., & Administration. (2013). Land value capture in policy and practice. *Journal of Property Tax Assessment*, *10*(2), 5-21.

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Wang, L., & Xia, H. (2024). A Comprehensive Review of the Development Characteristics and Future Trends of TOD in Chinese Urban Rail Transit. *Urban Rail Transit*, 10(4), 335-349.

Wu, J., Plantinga, A. J. J. J. o. E. E., & Management. (2003). The influence of public open space on urban spatial structure. 46(2), 288-309.

Yen, B. T., Feng, C.-M., & Lee, T.-C. J. A. T. S. (2023). Transit-oriented development strategy in Taiwan: An application of land value capture. 9, 100094.

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