



COMMERCIAL CORRIDOR DEVELOPMENT STRATEGY THROUGH THE APPLICATION OF THE WALKABLE COMMERCIAL STRIP CONCEPT IN URBAN AREA OF JEMBER CITY

STRATEGI PENGEMBANGAN KORIDOR KOMERSIAL MELALUI PENERAPAN KONSEP *WALKABLE COMMERCIAL STRIP* PADA KAWASAN PERKOTAAN JEMBER

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Article Info:

- Article submitted: 31 January 2023
- Article received: 28 November 2023
- Available online: 31 March 2024

ABSTRACT

Walkability is an essential concept to consider when planning a sustainable city. This study aims to determine the walkability development strategy of the Jember City commercial corridors urban area based on people's and experts' perceptions of the Walkable Commercial Strip concept. The study was conducted in the urban area of Jember City Golden Triangle. The methods of analysis used in this study are ordinal logistic regression and AHP. Based on people's perceptions, the concepts that have the highest odds of influencing the first corridor's walkability level are the ones related to the available amenities variable, while the concept that has the highest odds of influencing the second and the third corridors' walkability level is the concept that is related to the walking path modal conflict variable. The order in which corridors have the highest development priority starts with the first corridor, Gajah Mada - Sultan Agung Street, followed by the second corridor, Ahmad Yani Street, and ends with the third corridor, Trunojoyo Street – HOS Cokroaminoto Street. The walkability development strategy for the urban area of Jember City commercial corridors is to start the order of development according to the order of priority and apply the development concepts that have the highest opportunity to influence the walkability level of each corridor based on people's perception.

Key Words: Walkability, Commercial Corridors, Urban Area of Jember City, AHP, Ordinal Logistic Regression

ABSTRAK

Walkability merupakan konsep penting yang perlu dipertimbangkan dalam perencanaan kota berkelanjutan. Penelitian ini bertujuan untuk merumuskan strategi pengembangan walkability kawasan koridor komersial pada Perkotaan Jember berdasarkan persepsi masyarakat dan para ahli terhadap konsep Walkable Commercial Strip. Penelitian dilakukan pada kawasan Segitiga Emas Perkotaan Jember. Metode analisis yang digunakan dalam penelitian ini adalah regresi logistik ordinal dan AHP. Berdasarkan persepsi masyarakat, konsep yang memiliki peluang paling tinggi untuk mempengaruhi tingkat walkability pada koridor pertama adalah konsep yang berkaitan dengan variabel amenities yang tersedia, sedangkan konsep yang memiliki peluang paling tinggi untuk mempengaruhi tingkat walkability pada koridor kedua dan ketiga adalah konsep yang berkaitan dengan variabel konflik moda jalur pejalan kaki. Urutan koridor yang memiliki prioritas pengembangan tertinggi dimulai dari koridor pertama yaitu Jalan Gajah Mada - Jalan Sultan Agung, diikuti oleh koridor kedua yaitu Jalan Ahmad Yani, dan diakhiri oleh koridor ketiga yaitu Jalan Trunojoyo - Jalan HOS Cokroaminoto. Strategi pengembangan walkability pada koridor komersial kawasan Perkotaan Jember adalah dengan memulai urutan pembangunan sesuai dengan urutan prioritas dan menerapkan konsep pembangunan yang memiliki peluang paling tinggi untuk mempengaruhi tingkat walkability pada masing-masing koridor berdasarkan persepsi masyarakat.

Kata Kunci: Walkability, Koridor Komersial, Kawasan Perkotaan Kota Jember, AHP, Regresi Logistik Ordinal

1. INTRODUCTION

Walkability is an essential concept to consider when planning a sustainable city. The term walkability has many understandings. It encompasses the safety, security, economy, and convenience of traveling by walking (Krambeck, 2006). It has a tight correlation with public spaces, especially retail spaces because they have a symbiotic relationship (Tom, 2018). The concept of a walkable commercial area describes a trade and service area accessible by walking, cycling, or using public transportation, where the condition of the surrounding pedestrian paths is good, and pedestrians can enjoy the experience of using the path (Hack, 2013). We can see many examples of pedestrian-friendly commercial corridors in Indonesia, but many commercial corridors still have yet to apply such a concept. One example is an urban area of the Jember City commercial corridor.

Results based on the walkability index analysis conducted by Sulistiyono et al. (2022) show that the urban area of Jember City commercial corridors has an existing walkability level of 44.6665. This level indicates that the urban area of Jember City commercial corridors is unfriendly to pedestrians, prompting them to use other modes of transportation to reach the facilities and activities there rather than walking. Based on this research, it can be inferred that the urban area of Jember City commercial corridors has yet to apply such a concept. It is essential to implement a strategy to develop a walkable commercial corridor by implementing a development concept based on public perception of the Walkable Commercial Strip concept.

Development concepts are planned to increase the urban area of Jember City's walkability, such as those in the urban area of Jember City's Technical Material for Building and Environmental Plan. However, not everyone will agree on those concepts because everyone has a different perception of what makes a place comfortable for walking. People's perceptions are one of the essential factors to consider when developing a walking environment because the design of a walking environment can affect their willingness to walk as well as their safety and comfort when walking (Kweon et al., 2021; Ma et al., 2021). A well-designed walking environment can go a long way in helping people's perceptions (Ariffin & Zahari, 2013). So, this study aims to determine the walkability development strategy of the urban area of Jember City commercial corridors based on people's and experts' perceptions of the Walkable Commercial Strip concept.

2. DATA AND METHODS

2.1. Location

The study was conducted in Jember's Golden Triangle. It is a commercial corridor located in the heart of an urban area of Jember City. It is comprised of three corridors: (1) first corridor Gajah Mada – Sultan Agung Street, (2) second corridor Ahmad Yani Street, (3) third corridor Trunojoyo – HOS Cokroaminoto Street. According to Jember Regency's 2015 Regional Regulation No. 1 concerning Jember Regency's 2015-2035 Spatial Plans and the Attachment to the Minister of Public Works' Decree Number 631/KPTS/M/2009, the three corridors are a part of the national non-toll road network. One of the main functions of developing these corridors is as a center of commercial activities because they are a part of Kaliwates and Patrang Districts, which are classified as the centers for regional activities. The precise location of the study can be seen below in Figure 1.

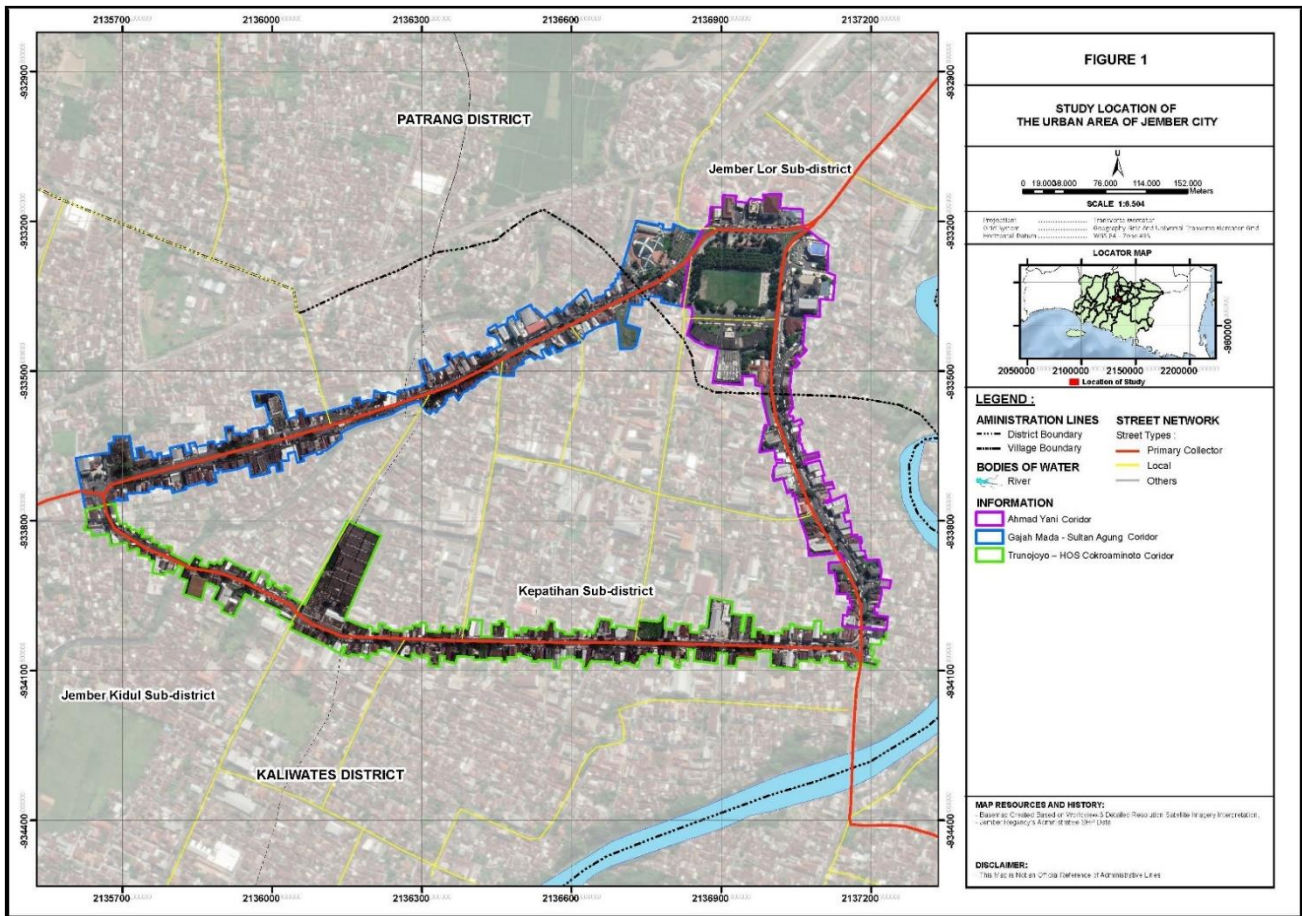


Figure 1. Study Location of the Urban Area of Jember City (ArcGIS, 2023)

2.2. Data

Two types of data were used in this study. First is the primary data. It consists of data collected from a sample of urban areas of Jember City pedestrians and stakeholders. A survey was conducted using an online questionnaire based on the stated preference model to collect data from a sample of 100 pedestrians in the urban area of Jember City, specifically on individuals who have walked in the commercial areas of Jember City within the past three months. The data from stakeholders were collected during a face-to-face interview using an AHP-type questionnaire. The stakeholders involved in this research were academic experts and government officials knowledgeable about the Walkable Commercial Strip concept and to determine the walkability development strategy of the urban area of Jember City commercial corridors.

The second type of data used is secondary data. This data consists of literature related to this study, such as past research and the urban areas of Jember City Technical Material for Building and Environmental Plan.

2.3. Method of Analysis

The analyses used in this study are the ordinal logistic regression and the analytical hierarchy process.

a. Ordinal Logistic Regression

Parry (2020) explains ordinal logistic regression as an analytical method used to provide an overview of the relationship between an ordinal response variable (dependent) and one or more predictor variables (independent). The cumulative logit model is the model that is generally used in carrying out ordinal logistic regression due to its broad applicability and intuitive interpretation (Adejumo & Adetunji, 2013; Setyobudi, 2016). After forming the models, they must undergo various

tests to determine their validity and suitability. The tests are as follows (Adawiyah, 2021; Hacar et al., 2020; Setyobudi, 2016; Trivanni, 2018).

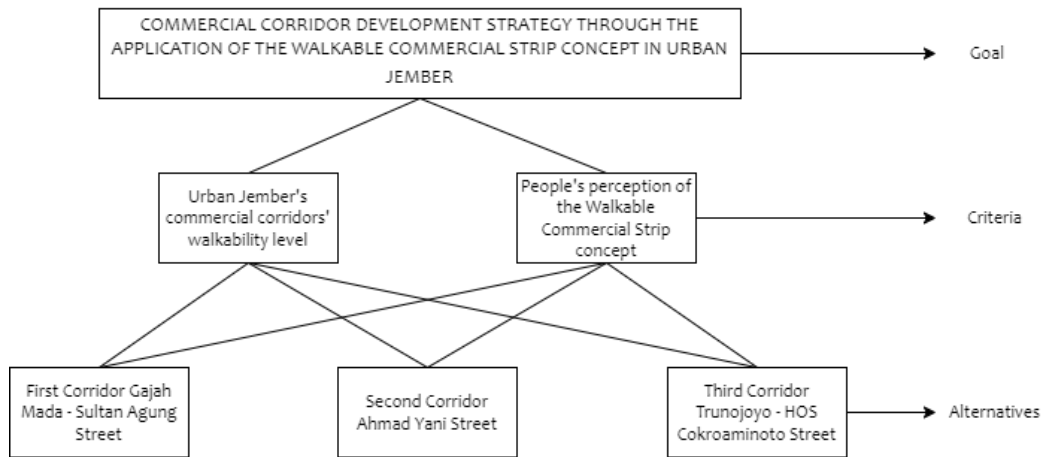
- 1 The Significance Test: Test the significance of the models simultaneously and individually.
 - Likelihood ratio test: test the models simultaneously. The hypotheses tested are $H_0: \beta_1 = \beta_2 = \dots = \beta_i = 0$ (none of the predictor variables have any influence on the response variable) and H_1 : at least one $\beta_i \neq 0$. The criteria to reject H_0 is p-value $< \alpha$ ($\alpha = 0.05$).
 - Wald test: Test the models individually. The hypotheses tested are $H_0: \beta_i = 0$ (the i-th predictor variable does not affect the response variable) and $H_1: \beta_i \neq 0$ (the i-th predictor variable affects the response variable); $i = 1, 2, \dots, p$. The criteria to reject H_0 is p-value $< \alpha$ ($\alpha = 0.05$).
- 2 Using the deviance test, the Goodness of Fit Test evaluates the discrepancy between the current and full models. The models are deemed suitable if they have a significance value of >0.05 .
- 3 The Coefficient Determination Test: serves to see how much influence the predictor variables have on the response variable using the McFadden, Cox and Snell, and Nagelkerke test.

After the models are deemed valid and suitable, the next thing to do is to interpret them using the odds ratio. The odds ratio is described by Wang et al. (2022) as a measure of association. It measures the association between exposure and outcome.

This study used this method to analyze the data obtained from the stated preference questionnaire, which was done using SPSS 25.

b. Analytical Hierarchy Process (AHP)

The Analytical Hierarchy Process (AHP) is one of the basic approaches to decision-making. The analysis is carried out by doing a simple pairwise comparison, which will then be used to build overall priorities to determine the ranking of the existing alternatives (Saaty & Vargas, 2012). This analysis facilitates the selection of the best alternative by assessing many criteria (Ghazvinei et al., 2017). The role of this analysis was to determine the priority ranking for which corridor needs to be developed first based on input from stakeholders. This analysis was done using Expert Choice v.11. The hierarchical structure of this analysis for this study can be seen in Figure 2.



Source: Analysis, 2023

Figure 2. AHP Hierarchical Structure

2.4. Research Variables

The variables used in this research consist of the response and predictor variables. The response variable used in this study is the future walkability level of each corridor resulting from the application of the walkability development concepts based on people's perceptions, while the predictor variables in this study

use only the walkability variables from Sulistiyono et al. (2022) that are related to the walkability development concepts for each corridor.

Sulistiyono et al.'s (2022) research consisted of nine variables of walkability that were derived from the modified version of Krambec's (2006) Global Walkability Index to fit Asian Cities by Leather et al. (2011). The variables consist of (1) Availability of Walking Paths, (2) Availability of Crossings, (3) Amenities, (4) Disability Infrastructure, (5) Obstructions, (6) Walking Path Modal Conflict, (7) Security from Crime, (8) Grade Crossing Safety, and (9) Motorist Behavior. However, not all development concepts from the urban area of Jember City Technical Material for Building and Environmental Plan correspond to those nine variables. Hence, the variables chosen to be this research's predictor variables are only those related to the walkability development concepts. Based on the literature study on the urban area of Jember City Technical Material for Building and Environmental Plan and Sulistiyono et al.'s (2022) variables, the walkability development concepts and their related walkability variables can be seen in Table 1.

Table 1. The Urban Area of Jember City Walkability Development Concepts

Corridors	Development Concepts	Related Walkability Variables
Gajah Mada – Sultan Agung Street	Adding street furniture such as trash cans and location information boards evenly along the corridors	Amenities
	Adding aesthetic supporting attributes such as Jember-style ornaments on street furniture and adapting them to the surrounding building styles	Amenities
	Adding shadings and pollution-absorbing vegetation, such as Angsana and Kiara, every 10-20 m between the vehicle lane and the sidewalk along the corridor	Amenities
	Adopting Malioboro's city walk concept as a form of development and improvement of pedestrian paths while still adapting to the characteristics of Jember Regency	Availability of Walking Paths
	Revitalizing JPOs to be functional and disability friendly	Availability of Crossings Disability Infrastructure
	Adding special lanes for the disabled	Disability Infrastructure
Ahmad Yani Street	Revitalizing and widening the sidewalks	Availability of Walking Paths
	Completing facilities for pedestrians with disabilities	Disability Infrastructure
	Controlling and relocating street vendors to concentrate in a specific location so that they don't operate on pedestrian paths	Obstructions
	Adding pedestrian rest space every 200-400 m, complete with street furniture such as trash cans, benches, etc.	Amenities
	Prohibiting any vehicles from parking on the sidewalk	Obstructions Walking Path Modal Conflict
	Arranging and adding variations of vegetation	Amenities
Trunojoyo – HOS Corkroaminoto Street	Revitalizing and widening the sidewalks	Availability of Walking Paths
	Completing facilities for pedestrians with disabilities	Disability Infrastructure
	Controlling and relocating street vendors to concentrate in a specific location so that they don't operate on pedestrian paths	Obstructions
	We add pedestrian rest space every 200-400 m, complete with street furniture such as trash cans, benches, etc.	Amenities
	Prohibiting any vehicles from parking on the sidewalk	Obstructions Walking Path Modal Conflict
	Arranging and adding variations of vegetation	Amenities

Source: Analysis, 2023

As can be seen from Table 1, only certain walkability variables correspond to the development concepts. So, based on Table 1, the research variables used in this study can be seen in Table 2.

Table 2. Research Variables

Variables	Variable descriptions for each corridor		
	First corridor	Second corridor	Third corridor
Y	Future walkability level after application of walkability development concept		
X ₁	Available walking paths	Available walking paths	Available walking paths
X ₂	Available crossings	Obstructions	Obstructions
X ₃	Disability infrastructure	Disability infrastructure	Disability infrastructure
X ₄	Available amenities	Walking path modal conflict	Walking path modal conflict
X ₅	-	Available amenities	Available amenities

Source: Analysis, 2023

3. RESULT AND DISCUSSION

3.1. People's Perception of the Walkable Commercial Strip Concept

Before determining the strategy needed to develop an urban area of Jember City commercial corridors' walkability, first and foremost, what needed to be determined was people's perception of the concepts planned for the walkability development of the urban area of Jember City commercial corridors since the ones who will make use of the results from the development are the masses. Based on the results from the processed data, the models formed can be seen in Table 3.

Table 3. Formed OLR Models

Corridors	Formed Models
Gajah Mada – Sultan Agung Street	$\text{logit}(Y_2) = 64.992 + 7.283X_1 + 9.876X_2 - 3.423X_3 + 13.769X_4$ $\text{logit}(Y_3) = 99.425 + 7.283X_1 + 9.876X_2 - 3.423X_3 + 13.769X_4$
Ahmad Yani Street	$\text{logit}(Y_2) = 38.372 + 3.943X_1 + 4.804X_2 - 0.931X_3 + 5.088X_4 + 1.977X_5$ $\text{logit}(Y_3) = 50.917 + 3.943X_1 + 4.804X_2 - 0.931X_3 + 5.088X_4 + 1.977X_5$
Trunojoyo – HOS Corkroaminoto Street	$\text{logit}(Y_3) = 279.306 + 40.433X_1 + 40.621X_2 + 1.613X_3 + 40.775X_4 - 37.876X_5$

Source: Analysis, 2023

As said before, the formed models were tested through various tests to determine their validity and suitability. First is the significance test. Based on the likelihood ratio test of the corridors as a whole, the decision is to accept H₁ and reject H₀. This means that at least one predictor variable simultaneously influences the response variable for each corridor. Therefore, based on the Wald test, the decision is to accept H₀ and reject H₁. It means that none of the predictor variables significantly influence the response variable for each corridor.

Next are the goodness of fit and the coefficient determination tests. The results of the tests can be seen in Table 4.

Table 4. The Goodness of Fit and Coefficient Determination Test Results

Corridors	The goodness of fit sig. value	Coefficient Determination Value
Gajah Mada – Sultan Agung Street	1.000	97.9%
Ahmad Yani Street	0.999	87.1%
Trunojoyo – HOS Corkroaminoto Street	1.000	100%

Source: Analysis, 2023

Based on the goodness of fit test significance value, as stated in Table 4, all of the models for the three corridors are deemed suitable to use because all of the models have a significance value of over 0.05. Based on the coefficient determination value in Table 3, the response variable of each corridor is influenced by the predictor variables as much as the coefficient determination values of each corridor stated in Table 3. It can also be seen that the coefficient determination values of the first and second corridors are not 100% like the third corridor. This means that the first and second corridors' response variables are influenced by the predictor variables used in this study and other variables outside of this study's predictor variables, as much as the rest are not included in the values in Table 5. On the other hand, the third corridor's response variable is entirely influenced by the predictor variables used in this study.

After the models were tested, they were interpreted using the odds ratio. It was then clear which concept had the highest to the lowest opportunity to influence the urban area of Jember City commercial corridors' walkability. The odds ratio values of each variable can be seen in Table 5.

Table 5. Odds Ratio Values

Corridors	Variables	Odds Ratio Value
First corridor Gajah Mada - Sultan Agung Street	Available amenities	954,545.64
	Available crossings	19,457.60
	Available walking paths	1,455.34
	Disability infrastructure	0.03
Second corridor Ahmad Yani Street	Walking path modal conflict	162.06
	Obstructions	121.99
	Available walking paths	51.57
	Available amenities	7.22
	Disability infrastructure	0.39
Third corridor Trunojoyo – HOS Cokroaminoto Street	Walking path modal conflict	510,911,393,880,626,033.46
	Obstructions	437,990,088,560,567,122.07
	Available walking paths	362,925,074,898,464,442.46
	Disability infrastructure	5.01
	Available amenities	3.55

Source: Analysis, 2023

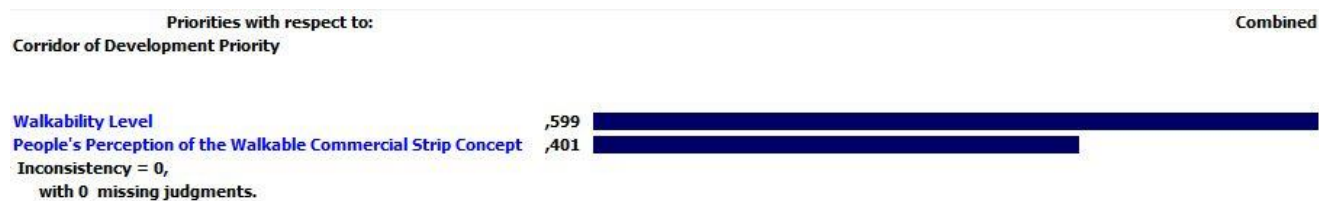
Based on Table 5, it can be inferred that the development concepts that have the highest chance to influence the walkability level of each corridor based on people's perception are the ones that have the highest odds ratio value. The concepts from the urban area of Jember City Technical Material for Building and Environmental Plan that have the most significant impact on the walkability of the first corridor are related to the availability of amenities. The concepts are:

- a. Adding street furniture such as trash cans and location information boards evenly along the corridors
- b. Adding aesthetic supporting attributes such as Jember-style ornaments on street furniture and adapting them to the surrounding building styles
- c. Adding shadings and pollution-absorbing vegetation, such as Angsana and Kiara, every 10-20 m between the vehicle lane and the sidewalk along the corridor.

As for the second and third corridors, the concept with the highest chance to influence their walkability level based on people's perception is related to the walking path modal conflict variable. The concept prohibits any vehicles from parking on the sidewalk.

3.2. Order of Development Priority

After understanding people's perceptions of the concepts planned, the next step was to determine the order of development priority using the AHP analysis. The first thing to be done was determining the priority weights between criteria. Based on the input from stakeholders, the results from the calculation of the priority weight between criteria can be seen in Figure 3.

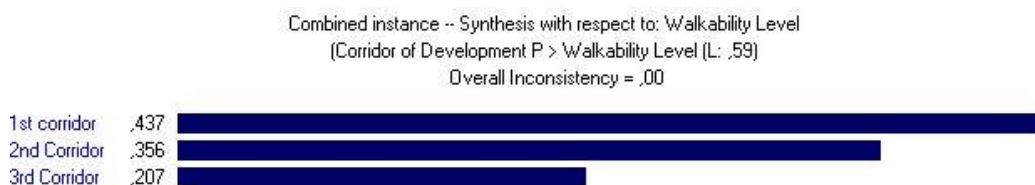


Source: Analysis, 2023

Figure 3. Priority Weights Between Criteria

Based on Figure 3, the existing walkability level criteria have a priority weight of 0.599, and the people's perception criteria have a priority weight of 0.401. This means that the existing walkability level criteria are rated as a higher priority than people's perception criteria. The result is considered consistent because it has a consistency ratio of 0.00, which is lower than 0.1.

The next thing that needed to be determined was the priority weight of the alternatives against the walkability level criteria. The result of this calculation can be seen in Figure 4.

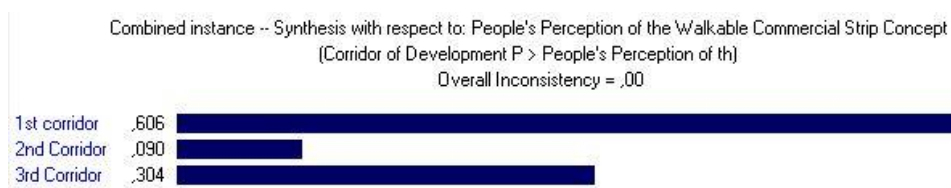


Source: Analysis, 2023

Figure 4. Priority Weights of Alternatives against the Walkability Level Criteria

As shown in Figure 4, the first corridor has a priority weight of 0.437, the second has a priority weight of 0.356, and the third has a priority weight of 0.207. The result of this calculation is considered consistent because it has a consistency rate below 0.1. So, it can be concluded that based on the walkability level criteria, the first corridor has the highest priority of development, followed by the second corridor, and finally, the third corridor.

After that, the priority weight of the alternatives was determined against the people's perception criteria. The result of this calculation can be seen in Figure 5.

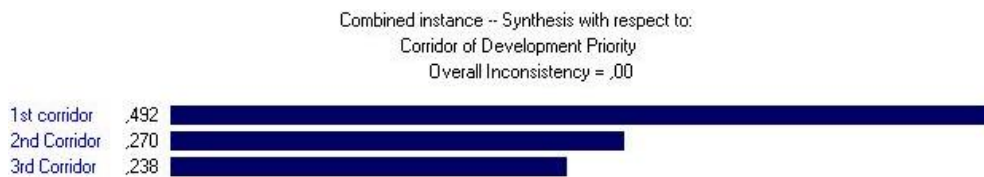


Source: Analysis, 2023

Figure 5. Priority Weights of Alternatives against the People's Perception Criteria

As shown in Figure 5, the first corridor has a priority weight of 0.606, the second has a priority weight of 0.090, and the third has a priority weight of 0.304. The result of this calculation is considered consistent because it has a consistency rate below 0.1. So it can be concluded that based on people's perception criteria, the first corridor has the highest priority of development, followed by the third corridor, and finally, the second corridor.

Overall, the order in which corridors have the highest development priority can be seen in Figure 6 below.



Source: Analysis, 2023

Figure 6. Order of Development Priority

It can be seen from Figure 6 that the first corridor has a priority weight of 0.492, the second corridor weighs 0.270, and the third corridor weighs 0.238, with a consistency ratio of 0,00. Aside from the results being consistent, it means that the order in which corridors have the highest development priority starts with the first corridor Gajah Mada - Sultan Agung Street, followed by the second corridor Ahmad Yani Street, and ends with the third corridor Trunojoyo – HOS Cokroaminoto Street.

3.3. The Walkability Development Strategy of the Urban Area of Jember City Commercial Corridors

Based on both analyses above, the strategy needed to develop the walkability of the urban area of Jember City commercial corridors is to start the development from the first corridor, Gajah Mada – Sultan Agung Street, and apply the development concepts with the highest odds. For this corridor, the development concepts with the highest odds are (1) adding street furniture such as trash cans and location information boards evenly along the corridors, (2) adding aesthetic supporting attributes such as Jember-style ornaments on street furniture and adapting them to the surrounding building styles, and (3) adding shading and pollution-absorbing vegetation such as Angsana and Kiara every 10-20 m between the vehicle lane and the sidewalk along the corridor. The development is then successively continued to the second corridor and then the third corridor, in which the concept applied to both corridors is the one that prohibits parking vehicles on the sidewalk.

Table 6. The Walkability Development Strategy of the Urban Area of Jember City Commercial Corridors

Order of Priority	Corridors	Walkability Development Concept with the Highest Odds
1	First corridor Gajah Mada - Sultan Agung Street	Adding street furniture such as trash cans and location information boards evenly along the corridors Adding aesthetic supporting attributes such as Jember-style ornaments on street furniture and adapting them to the surrounding building styles Adding shadings and pollution-absorbing vegetation, such as Angsana and Kiara, every 10-20 m between the vehicle lane and the sidewalk along the corridor
2	Second corridor Ahmad Yani Street	Prohibition of parking vehicles on the sidewalk
3	Third corridor Trunojoyo – HOS Cokroaminoto Street	Prohibition of parking vehicles on the sidewalk

Source: Analysis, 2023

3.4. Discussion

Walking is the oldest mode of transportation. It is also the most common and cheapest form of transportation available (Kinyingi et al., 2020; Loukaitou-Sideris, 2020; Mutaqqin & Khodizah, 2023; Shaaban, 2019). Aside from that, it also has many positive benefits, ranging from environmental and health benefits to social and economic ones (Sari et al., 2020; Zhou et al., 2019). However, despite having a multitude of benefits, walking as a mode of transport has been severely reduced in many cities in the world over the last few decades. It is still lacking in the overall transport system. This led to underestimating its significance (Hassan & Elkhateeb, 2021; Loukaitou-Sideris, 2020).

Historically speaking, walking was once the main mode of transportation in the world. However, that all changed with the rapid growth of urbanization and the introduction of motorized transportation. As the population keeps growing, so does the use of motorized vehicles. This phenomenon coincides with reducing walking as a transport mode (Ariffin & Zahari, 2013; Baobeid et al., 2021; ITDP Indonesia, 2020; Loukaitou-Sideris, 2020). Although the modernization of transport has contributed significantly to the development of human life, it also left negative impacts. The transport sector has become one of the major contributors to Earth's climate change, which impacts the environment, health, and economy (Bassi et al., 2022; UN-DESA, 2021). Even so, the improvement and expansion of the transport system cannot be stopped as the demand for it grows with the increasing population each year. To that extent, we face a situation where we also need to address the unwanted consequences of the current transport system. With all that in mind, the planning and betterment of the transport system need to be done with sustainability in mind (Bassi et al., 2022; Kurniawati & Ananta, 2020). This is why urban planning and design centered on pedestrians, walking, and walkability has increasingly become a hot topic amongst scholars and decision-makers involved in discussions about sustainability (Baobeid et al., 2021; Blečić et al., 2020).

Like any other human behavior, walking is influenced by many internal and external factors. One of these factors is the environment for walking (Kinyingi et al., 2020). As a socially equitable mode of transportation that is most accessible to the masses, several studies agree that it is crucial for walking to be supported by a well-designed built environment that would encourage people, regardless of their backgrounds and abilities, to walk more (Aghaabbasi et al., 2019; Ariffin & Zahari, 2013; Bahari et al., 2013; Oakes et al., 2007; Priyono & Pradoto, 2021; Sari et al., 2020). That is because a built urban environment can influence people's perception of spaces and their behavior, determining their everyday actions and lives (D'Acci, 2019). That is why people's perception is one of the important things to consider when evaluating the walking environment, as it informs decision-makers of people's thoughts on it and helps identify and create a safe and desirable walking environment (Kinyingi et al., 2020; Mulia & Manullang, 2018).

4. CONCLUSION

The development concepts that have the highest opportunity to influence the walkability level of the corridor Gajah Mada – Sultan Agung Street are the concepts of adding street furniture evenly along the corridor, adding aesthetic supporting attributes with Jember characteristics, and adding shading and pollution-absorbing vegetation. As for the corridor Ahmad Yani Street and the corridor Trunojoyo – HOS Cokroaminoto Street, the concept with the highest opportunity to influence their walkability level is the concept that prohibits vehicle parking on sidewalks. The order of priority for the urban area of Jember City commercial corridor's walkability development starts with the corridor Gajah Mada – Sultan Agung Street, which has a priority weight of 0.492. The order is followed by the corridor Ahmad Yani Street with a priority weight of 0.270. Lastly, it ends with the corridor Trunojoyo – HOS Cokroaminoto Street with a weight of 0.238. The walkability development strategy for the urban area of Jember City commercial corridors is to start the order of development according to the order of priority and apply the development concepts that have the highest opportunity to influence the walkability level of each corridor based on people's perception.

5. ACKNOWLEDGMENTS

Thank you to the Government of Jember Regency, especially the Regional Planning and Development Agency, the Public Works Office of Cipta Karya and Spatial Planning, and the Transportation Office for their data support and willingness to be respondents in the implementation of the research. Thanks also go to the Institute for Research and Community Service of the Universitas Jember for facility support during the research activities.

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