SEESDGJ
Social, Ecology, Economy for Sustainable Development Goals Journal
SEESDGJ 1(1): 43-62
ISSN 3025-3942

Research

Basuki Rahmat Corridor's sidewalk: an observation

Veronica Mandasari [1]*

[1] Cluster of Interaction, Community Engagement, and Social Environment School of Environmental Science, Universitas Indonesia
* Correspondence: veronicamndsr@gmail.com

Received Date: June 22, 2023 Revised Date: July 31, 2023 Accepted Date: July 31, 2023

Cite This Article:
Mandasari, V. (2023). Basuki Rahmat Corridor's sidewalk: an observation. *Social, Ecology, Economy for Sustainable Development Goals Journal, 1*(1), 43-62. https://doi.org/10.61511/seesdgj.v1i1.2023.196

Abstract

The Tunjungan area, especially the Jalan Basuki Rahmat corridor, is the object of this study because this corridor is an essential element of accessibility for the trade and service area of Surabaya City.. This study aims to observe the environment of the Basuki Rahmat Street corridor and identify the condition of the existing pedestrian paths. The research questions are as follows: (1) Identifying Basuki Rahmat corridor in general; (2) Analysing sidewalk's condition along the Basuki rahmat corridor. This research has clear goals because the previous research has yet to elaborate detailed information on the Basuki Rahmat corridor comprehensively. Thus, this study will produce profound observations on how the sidewalk condition is maintained and affects surrounding land use. Observations were made by visiting the study location directly to observe the existing condition of the pedestrian paths in the Jalan Basuki Rahmat Corridor, Surabaya. Observations were carried out in 3 ways, namely (1) field observations related to the existence of facilities, furniture, and the condition of the pedestrian paths, and (2) direct measurements related to the dimensions of the pedestrian paths. From the study, the researcher found that 92,4% of the land uses are covered by commercial areas. Meanwhile, 2084,43 meters (0,2 km) of the pedestrian paths is Sidewalk, and 197 meters (0,01 km) is Arcade. Another important point to note is the social interaction that occurs is due to the existence of a motorcycle community that utilizes pedestrian paths on weekends. Overall, the researcher discovered that Basuki Rahmat Corridor has an enormous potential to be a walkable area if the facilities are improved. The land use environment has already given a lively vibe because of the various activities offered, yet the stakeholders still need to be concerned with the sustainability of the corridor.

Keywords: commercial area; pedestrian; pedestrian path; walkability

1. Introduction

All human activities need space. This condition is reinforced by the statement of Law No. 26 of 2007 concerning Spatial Planning that space is a container that includes land space, sea space, and air space, including space inside the earth as a unified territory where humans and other creatures live, carry out activities, and maintain its survival. Experts also define open space as one of the urban spatial structures in the form of voids in which functional activities or ritual activities occur that bring together groups of people in their regular daily routines and routine activities so that it can also be used as one of the support social interaction (Carr, 1992; Zahnd, 1999). According to Shirvani (1985), the elements of open space are all landscape features, hardscape (roads, sidewalks, etc.), parks, and urban

recreation spaces. Open spaces dominated by the natural environment outside and inside the city, such as parks, courtyards, city recreation areas, and green belts, are called green open spaces (Trancik, 1986).

The Tunjungan area, especially the Jalan Basuki Rahmat corridor, is the object of this study because this corridor is an essential element of accessibility for the trade and service area of Surabaya City. According to the Regulation of the Minister of Public Works No.03/PRT/M/2014, a pedestrian network that is safe, comfortable, and humane in urban areas is an essential component that must be provided to increase the effectiveness of mobility of residents in urban areas. One of the most significant activity generators in the study area is the use of trade and service land, which previously was able to revive this corridor. This study aims to observe the environment of the Basuki Rahmat Street corridor and identify the condition of the existing pedestrian paths. The research questions are as follows:

1. Identifying Basuki Rahmat corridor in general
2. Analysing sidewalk's condition along the Basuki rahmat corridor

This research has clear goals because the previous research has yet to elaborate detailed information on the Basuki Rahmat corridor comprehensively. Thus, this study will produce profound observations on how the sidewalk condition is maintained and affects surrounding land use.

2. Methods

The paradigm used in this research is rationalism research, namely research where the source of the truth of the theory is based on sensual empirical, logical empirical (thoughts, abstraction, simplification), and ethical empirical (idealization of reality) which will then produce nomothetic concepts/directions. This approach uses reasoning to acquire knowledge. This approach was chosen because the research departs from the problems/phenomena in the field. The Rationalist Paradigm (verstehen) views social reality as understood by researchers based on existing theories and dialogue with understanding the subject under study/empirical data. Rationalism recognizes reality from a sensual perspective, a logical-theoretical perspective, and an ethical perspective. The rationalistic qualitative research method recognizes another logical mindset besides the relational mindset. Rationalistic qualitative research design departs from a theoretical framework built from the meaning of previous research results, general theories, and the ideas of experts. It is constructed into something that contains several problems that need further investigation.

Observations were made by visiting the study location directly to observe the existing condition of the pedestrian paths in the Jalan Basuki Rahmat Corridor, Surabaya. Observations were carried out in 3 ways, namely (1) field observations related to the existence of facilities, furniture, and the condition of the pedestrian paths, and (2) direct measurements related to the dimensions of the pedestrian paths. The following is a more detailed explanation of field observations:

Field Observations

Field observations, in general, were carried out to complete the discussion on the general description and to know the characteristics of the observation area as a whole. This method is carried out by taking pictures and observing the field for several days. Then, the data obtained are presented as narratives, tables, maps, and pictures.

In this case, the research variables were obtained from a literature review synthesis, namely various related theories used according to the research theme. Below is a table of variables along with the indicators and units used in this study:

Table 3.1. Research Parameters, Indicators, Variables and Sub-variables

Parameter	Indicator	Variable	Sub-variable	Unit
Safety	Existence of crossing facilities	Number of crossing facilities		Unit
		Location of crossing facilities		Location point
		The time it takes for pedestrians to cross		Minute
	Availability of signs and lighting	Number of signs		Location units and points
		Signage Location		
		Number of street lights		Unit
		Location of street lights		
Comfort	The physical condition of the pedestrian path	Pedestrian path dimensions		Meter
		Number and location of pedestrian walkways	Number of shade trees	Units and locations
			Location of Shade Trees	
			Number of benches	
			Bench location	
			Number of trash cans	Units and locations

			Trash cans location	Unit
	Interaksi sosial	The existence of pedestrian paths that support social interaction	The existence of the sidewalk as a place to interact	Meter
			The existence of the corridors of the shopping center building as a place for interaction	Meter
			The existence of open office spaces as a place for interaction	Area
			The existence of the edge of the green line as a place for interaction	Meter
Attractiveness	Visual view	Sidewalk design		
		Varied vegetation		
		The existence of graffiti / murals		Unit/titik lokasi
Connectivity	Availability of public transportation modes	Types of public transportation modes		Unit/buah
		Number of modes of public transportation		

		Ease of pedestrians to reach the location of public transport stops		Menit
	Continuity and accessibility of pedestrian paths	Pedestrian facilities to reach the destination		Menit
		Type and length of pedestrian paths specifically for people with disabilities		Meter
Variations in land use patterns	Land use (Commercial Area)	Type of land use	Macro land use	Luas (ha)
			Micro land use	Unit
		Space Utilization Intensity	Building Covered Ratio (BCR)	Percentage (%)
			Floor Area Ratio (FAR)	Percentage (%)
			Property Line	Percentage (%)

Source: Author, 2014

3. Results and Discussion

The section contains both results and discussion of the research.

3.1. Macro Land Use

Land use in the study area is dominated by trade and services. Jalan Basuki Rahmat, the golden triangle area of Surabaya, has grown into a trade, service, and office area that significantly contributes to the city's economy. Physically, both administrative and business activity centers are scattered along this corridor so that mobility facilities are more commonly found on Jalan Basuki Rahmat, a north-south corridor. Land use along the Basuki Rahmat Corridor includes an allotment of trade and services, green open spaces, and the provision of city facilities, including public government facilities, offices, and public trade and services facilities. The percentage of macro land use in the study area is as follows:

Tabel 4.1. Proportion of Land Use

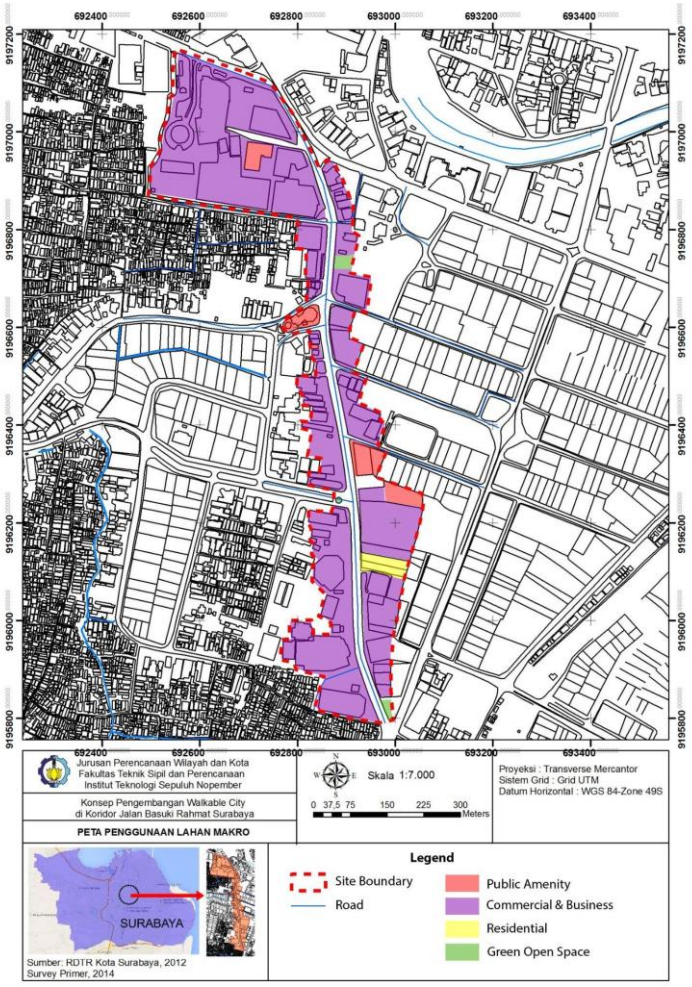
No.	Land Use	Area (Ha)	Percentage (%)
1.	Residential	0,34	1,65

2.	Commercial and Business	19,05	92,4
3.	Public Ammenity	1,04	5,04
4.	Green Open Space	0,178	0,86
Jumlah Total		20,60	100

(Source: ArcGIS Calculation Results, 2014)

Based on the calculation of the proportion of land above, the percentage of trade and services dominates the research area. The map of macro land use in the study area can be seen in Figure 4.3. Macro Land Use.

Figure. Macro Land Use
(Source: An Example of Source. Year of Source)



3.2. Micro Land Use

Micro land use in the study area is divided into trade and services. The trading area consists of the following:

Table 3.2. Allotment of Commercial Land

No.	**Commercial & Business**	**Unit**
1.	Shopping Center	1
2.	Shophouse	9
3.	Supermarket	1
4.	Minimarket	1
6.	Restaurant	2
7.	Cafe	1
8.	Hotel	6
9.	Showroom	4
10.	Bank	5
Total		**30**

Source: Primary Survey, 2014

3.3. Space Utilization Intensity (Building Covered Ratio, Floor Area Ratio, Property Line)
Based on field observations supported by the Basuki Rahmat Corridor UDGL literature survey, the IPR (Spatial Utilization Intensity) conditions in the study area are as follows:

Table 4.4. Conditions of BCR, FAR, and PL

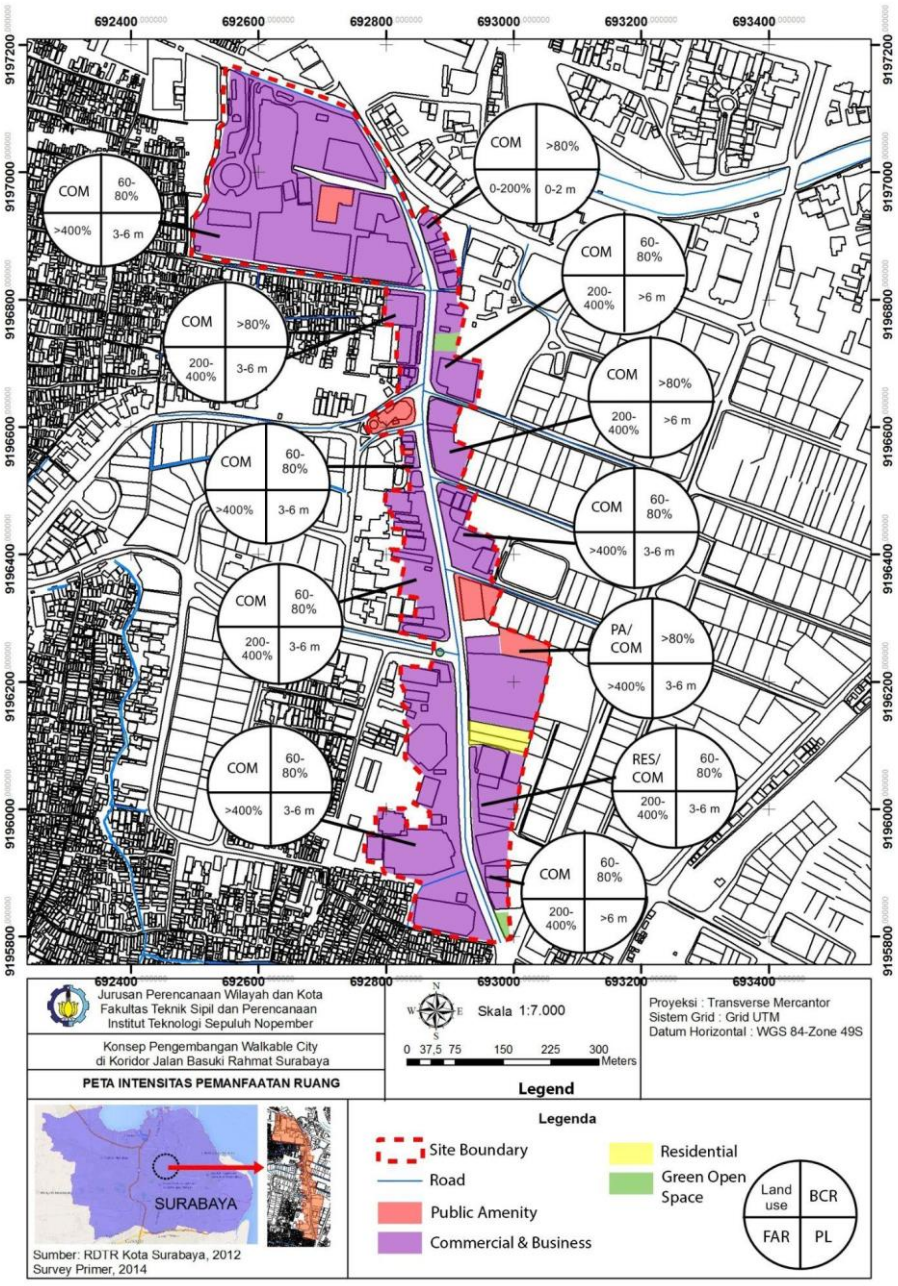
No.	**IPR Element**	**Remark**
1.	Building Covered Ratio (BCR)	Dominated by scores of 60-80% and >80%
2.	Floor Area Ratio (FAR)	Dominated by values of 200-400% and >400%
3.	Property Line (PL)	Dominated by sizes 3-6 meters and > 6 meters

Source: Primary Survey, 2014

Information regarding the IPR (Intensity of Space Utilization) in the observation area can be seen more clearly in Figure 4.4. Spatial Utilization Intensity Map

Figure. Spatial Utilization Intensity Map
(Source: An Example of Source. Year of Source)

3.4.



TYPOLOGY OF PEDESTRIAN PATHWAYS CORRIDOR JALAN BASUKI RAHMAT

Pedestrian space in the corridor of Jalan Basuki Rahmat includes the type of Pedestrian Space on the Side of the Road (Sidewalk), which is a system of pedestrian paths from the edge of the main road to the outer edge of the building's land. The pedestrian path's condition on the road's east side can be seen in the image below.

Figure. Sidewalk on the East and West Sides of the Road
(Source: Survey Primer, 2014)

Based on field observations, the type of sidewalk in the observation area has a consistent green/shaded path. The shade/green lane is along the pedestrian path. Furthermore, there are also types of arcade pedestrian spaces on the east and west sides of the road, as shown in the image below.

Figure. Arcade di Sisi Timur dan Barat Jalan
(Source: Survey Primer, 2014)

Pedestrian Space in Commercial/Office Areas (Arcade) is a pedestrian space adjoining a building on one or both sides. In the research area, the arcade pedestrian space adjoins the building on one side only and is located in a commercial area. This type is intermittent and has inconsistent green/shading paths. The length of the routes for these two typologies are:

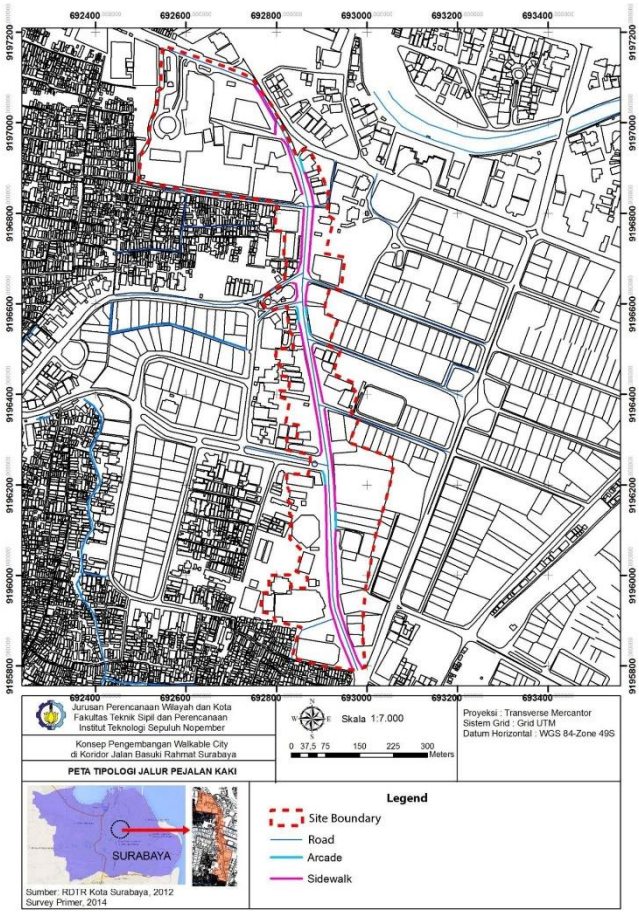
Table 4.5. Pedestrian Path Typology

No.	**Typology**	**Route Length**
1.	*Sidewalk*	2084,43 meter (0,2 km)
2.	*Arcade*	197 meters (0,01 km).

Source: ArcGIS Calculation Results, 2014

An overview of the length and location of the two types of pedestrian paths can be seen in Figure 4.7. Pedestrian Path Typology Map

Figure. Pedestrian Path Typology Map
(Source: PrimarySurvey, 2014)



3.5. Condition Of The Basuki Rahmat Corridor Pedestrian Path

3.5.1. Physical condition

A. Pedestrian Path Dimensions

The length of the pedestrian path in the study area is 2,230 meters. Meanwhile, the width of the lane varies from 3-4 meters.

Figure. Conditions of Pedestrian Path Width in the Study Area
Source: Primary Survey, 2014

B. Number and Condition of Pedestrian Path Facilities

a. Number and Condition of Pedestrian Signs/Signage

The signs on the pedestrian paths in the research area are quite numerous and informative. Signs such as no parking, special bicycle lanes, and no stopping greatly affect the comfort and safety of pedestrians.

Figure. Conditions of Signs on Observed Pedestrian Pathways
Source: Primary Survey, 2014

In addition to traffic signs, signs can also be in the form of advertisements. Billboards in the observation area are located in several locations with 4-5 billboard units/location points.

b. Number and Condition of Pedestrian Crossing Facilities

Crossing facilities available on the pedestrian path observed are zebra crossings and pedestrian bridges. The pedestrian bridges are located at 4 location points as shown in the Figure. Map of the Distribution of Pedestrian Path Facilities. Meanwhile, zebra crossing is located at 3 location points. One measure of the comfort and safety of a pedestrian facility is the length of time it takes to cross. Based on field observations, the length of time to cross in this area is <10 minutes with a pedestrian bridge, and 10 seconds with a zebra crossing using traffic control lights (Pelican Cross). This fact shows that pedestrians are safe enough to cross from one point to another. Meanwhile, the travel time to the crossing facility ranges from 3-4 minutes.

Figure. Condition of Crossing Facilities in Observed Pedestrian Pathways
Source: Primary Survey, 2014

c. Number and Lighting Conditions of Pedestrian Paths

Lighting in the observation area is in the form of LPJU (Public Street Lighting), with a distance of 20-30 meters between lights. The light model in the observation area is divided into 2, namely:

- Single pole lamp models are located along both sides of the Basuki Rahmat corridor
- The two-pronged pole lamp model is located in the median of the road

d. Number and Condition of Pedestrian Path Furniture

The pedestrian path furniture along the Jalan Basuki Rahmat Corridor is trash bins, seats and bus stops. Trash bins in the Jalan Basuki Rahmat Corridor are located along the East and West sides along the sidewalk, each trash bin being 50 meters apart. The trash can is divided into 2 (two) parts, namely the trash can for dry waste, with yellow color and the trash can for wet waste, with blue color. Along the Jalan Basuki Rahmat Corridor, there are 3 (three) bus stops, all of which have shelters on the sides. Meanwhile, there are only 2 location points for seating.

Figure. Garbage Bins, Bus Stops, and Seats in the Observation Area
Source: Primary Survey, 2014

The location points for the distribution of pedestrian pathway facilities can be seen in the figures. Meanwhile, below is the number of existing pedestrian walkway facilities in the observation area:

Table 4.6. Number of Pedestrian Path Facility Units

No.	**Pedestrian Path Facilities**	**Quantity**
1.	Signage	
	Traffic signs	
	- No parking/stopping	21
	- Bike Lane	4
	Reclame	
2.	Crossing Path	
	Zebra Cross	4

	Bridge	4
3.	Lighting	
	LPJU (Public Street Lighting)	57
	Traffic lights	1
4.	Outdoor Furniture	
	Trash bin	19
	Bench	2
	Bus Stop	4

Source: Primary Survey, 2014

A. Vegetation Variations and Conditions Along the Walking Path

The green belt model in the observation area is divided into two, namely plants in permanent pots and single-shade trees lined up along the pedestrian path so that the sidewalks are not used for street vendors. The types of plants in the observation area varied, namely argsana, king palm, cape, and bamboo (Department of Public Works, 2006).

Figure. Model Jalur Hijau di Wilayah Pengamatan
Sumber: Survey Primer, 2014

3.5.2. Non-Physical Condition

A. Conditions of Social Interaction Along the Pedestrian Path

Social interactions that occur in the research area occur because there is space for people to communicate. Facilities such as restaurants/cafes are a strong attraction for people to interact. In addition, street vendors (PKL) selling at several points on the pedestrian path are a special attraction for pedestrians/non-pedestrians to interact with each other. Based on field observations, other social interactions occur at night, especially on Saturdays. This sidewalk is used for the gathering of motorcycle groups which are quite a lot in number and occupy almost the entire sidewalk along Jalan Basuki Rahmat Corridor.

B. Interesting Activities Along the Walking Path

- Frequency of Visits to Shopping Centers

Tunjungan Plaza I-IV, a commercial center in Surabaya, is a special attraction for the community. This shopping center, with an area of 125,000 m^2, can accommodate 78,125 people based on the common human movement space of 1.6 m^2/person.

- Frequency of Park Visits

C. Visual Sights Along the Pedestrian Path

Based on field observations, the visual sights in the research area are vegetation, murals, lights, sidewalk designs, and billboards. Apart from being a visual aspect of the city, lights, vegetation and billboards also function as facilities for the pedestrian paths discussed above. Explanations regarding murals and sidewalk designs can be seen in the following table:

Table 4.7. Visualization in the Observation Area

No.	**Pedestrian Path Facilities**	**Remark**
1.	Mural	As one aspect of city visualization, the mural can be a special attraction for pedestrians. In the existing condition, the murals are only found on several sides of the building
2.	Sidewalk Design	The sidewalk design looks dynamic with the material from pattern concrete and the provision of motifs and colors.

Source: Primary Survey, 2014

Figure. Sidewalk Design in Observation Area
Source: Primary Survey, 2014

Figure. Murals in the Observation Area
Source: Primary Survey, 2014

A. Conditions of Transportation Along the Pedestrian Path

a. Availability of Public Transportation Modes

Modes of public transportation that pass through this corridor consist of MPU, buses, and taxis.

Table 4.8. Types of Transportation Modes in the Observation Area

No.	Types of Public Transportation Modes	Remark
1.	Bus	Damri : Perak-Bungurasih
2.	MPU	• Lyn V coklat : Krampung-Joyoboyo • Lyn RT ijo : Rungkut-Bratang-Pasar Turi • Lyn E ijo : Balungsari-Tidar-Karang Menjangan • Lyn DA kuning : JMP-Pasar Atum • Lyn W ijo toska : Karang Menjangan
3.	Taxi	

Source: Primary Survey, 2014

MPU, which has several routes, is the most widely used public transportation.

Figure. Public Transportation Modes in the Observation Area
Source: Primary Survey, 2014

b. Number of Crossroads

There are nine crossroads points in the observation area. Based on the literature and initial hypotheses, this will affect pedestrian accessibility because, with an intersection, the continuity of pedestrian circulation will be disrupted.

c. Ease of Access to Public Transportation Stop Locations

The table below is a description of the evaluation of each of the variables that have been discussed:

Table 4.9. Evaluation of Overview Variables

Indicator	**New Urbanism Theory**	**Existing Condition**	**Evaluation**
Existence of crossing facilities	A distance of 400 meters in accordance with the ability of Indonesians to walk	There are 4 units with a distance of about 400 meters between facilities	Required maintenance of pedestrian bridge buildings to improve safety for pedestrians
Availability of signs and lighting	· Signs are placed on the side of the road without blocking pedestrians · There are special pedestrian lights	· Signs vary according to function and are located on the side of the road · Lighting is sufficient with street lights, but not sufficient for pedestrians	· The number and location of markings are in accordance with the characteristics of the corridor · It is necessary to add special pedestrian lights in the future
The physical condition of the pedestrian path	The width of the sidewalk must be 1.8-3 meters	The effective width of the sidewalk is approximately 3 meters	The width of the sidewalk is sufficient but the physical

			condition needs to be improved
Social interaction	With the pedestrian path, it is hoped that there will be social interaction between pedestrians	The social interaction that occurs is due to the existence of a motorcycle community that utilizes pedestrian paths on weekends	It is necessary to add adequate sidewalk furniture so that natural social interaction occurs in the study area
Interesting activity	Interesting activity is one of the attractions for pedestrians	The study area is a CBD area so that most of its activities are commercial activities which are the main attraction of this corridor	Additional activities are needed in the study area to revive the Jalan Basuki Rahmat corridor so that it becomes a walkable corridor
Visual view	Visualization on the pedestrian path is needed to attract the interest of pedestrians in carrying out walking activities	The visual sights in the study area include graffiti and decorative street lights	It is necessary to add an interesting visualization in accordance with the characteristics of the corridor so that it becomes a walkable corridor
Availability of public transportation modes	The mode of transportation as an element of connectivity is needed in connecting the nodes of the movement of pedestrians	Public transportation modes in the study area are sufficient, but have not fully become a tool for pedestrians because pedestrian movement is uneven	It is necessary to add bus stops for city transportation to make it easier for pedestrians to access modes of transportation such as lyns, buses and others.
Continuity and accessibility of pedestrian paths	Areas that are walkable need continuity so as to create an integrated environment	Pedestrian paths in the study area as a whole have not been properly integrated because the physical condition of the sidewalks has not fully met the standards	Physical repair of damaged sidewalks is required

Land use (Commercial Area)	Mixed land use is one of the important principles in cultivating walking activities because with varied land uses pedestrians can easily access any activity.	Most of the land use in the study area is in the form of trade and service land, but the existence of settlements around the CBD area also shows that mixed-land use greatly affects the level of pedestrian movement.	It is necessary to add interesting activities so that walking activities increase

Source: Analysis, 2015

4. Conclusions

Based on the analysis above, it can be concluded that Basuki Rahmat Corridor needs improvements. The first is the required maintenance of pedestrian bridge buildings to improve pedestrian safety. Then, the number and location of markings should follow the characteristics of the corridor. It is also necessary to add unique pedestrian lights in the future. Physically, the width of the sidewalk is sufficient, but the physical condition needs to be improved. It is necessary to add adequate sidewalk furniture so that natural social interaction occurs in the study area.

From the non-physical elements, additional activities are needed in the study area to revive the Jalan Basuki Rahmat corridor to become a walkable corridor. Additionally, it is necessary to add an exciting visualization under the characteristics of the corridor so that it becomes a walkable corridor. From a connectivity perspective, it is necessary to add bus stops for city transportation to make it easier for pedestrians to access modes of transportation such as lyns, buses and others. Overall, the researcher discovered that Basuki Rahmat Corridor has an enormous potential to be a walkable area if the facilities are improved. The land use environment has already given a lively vibe because of the various activities offered, yet the stakeholders still need to be concerned with the sustainability of the corridor.

References

Carr, S. (1992). *Public Space: Environment and Behavior*. Cambridge: Cambridge University Press. https://books.google.com/books/about/Public_Space.html?id=pjo4AAAAIAAJ

Fruin, J. (1971). *Pedestrian Planning and Design*. New York: Metropolitan Association of Urban Designers and Environmental Planners, Inc. https://trid.trb.org/view/114653

Halim, D K. (2008). *Psikologi Lingkungan Perkotaan*. Bumi Aksara. Jakarta.

Hendrayana, I. G. B. K., Wedagama, D. P., & Widiarta, I. I. B. P. (2013). Analisis Pelayanan Fasilitas Pejalan Kaki. *Jurnal Ilmiah Elektronik Infrastruktur Teknik Sipil, 2*(1). https://ojs.unud.ac.id/index.php/jieits/article/view/5099

Heryanto, Bambang. (2011). *Roh dan Citra Kota*. Brilian Internasional. Surabaya. https://dokumen.tips/documents/roh-dan-citra-kota.html

Kerridge, J., Hine, J., & Wigan, M. (2001). Agent-based modelling of pedestrian movements: The questions that need to be asked and answered. *Environment and Planning B: Planning and Design, 28*(3), 327-341. https://doi.org/10.1068/b2696

Krippendorff, K. (2004). *Content Analysis: An Introdusction to its Methodology*. Sage. https://books.google.com/books/about/Content_Analysis.html?id=q657o3M3C8cC

McCormick, K., & Leccese, M. (Eds.). (2000). *Charter of the New Urbanism*. McGraw-Hill. https://books.google.com/books/about/Charter_of_the_New_Urbanism.html?id=iWFPAAAAMAAJ

Lenakoly, S. (2007). *Penilaian 20 Kota, Pedestrian Surabaya Rangking Satu*. http://news.detik.com/read/2007/09/03/100707/824728/466/penilaian-20-kota-pedestrian-surabaya-rangking-satu?nd771104bcj. Diakses 3 April 2014

Karras, G., & Lockyer, N. P. (2014). Quantitative Surface Analysis of a Binary Drug Mixture—Suppression Effects in the Detection of Sputtered Ions and Post-Ionized Neutrals. *Journal of The American Society for Mass Spectrometry*, *25*(5), 832-840. https://doi.org/10.1007/s13361-014-0847-6

Lynch, K. (1960). *The Image of The City.* MIT Press. Cambridge. https://www.miguelangelmartinez.net/IMG/pdf/1960_Kevin_Lynch_The_Image_of_The_City_book.pdf

Margono, S. (1995). *Metodologi Penelitian Pendidikan, Cet.7*. Jakarta: Rineka Cipta, 2007. https://opac.perpusnas.go.id/DetailOpac.aspx?id=635125

Mardalis. (2008). *Metode Penelitian : Suatu Pendekatan Proposal*. Jakarta: Bumi aksara. https://simpus.mkri.id/opac/detail-opac?id=7096

Martilla, J. & James J. (1977). *Importance- Performance Analysis*. Journal of Marketing, 14 (January): pp. 77-79. https://umnaw.ac.id/wp-content/uploads/2019/02/Importance-performance-analysis_Martilla-James-1977.pdf

Nasional, Direktorat Perkotaan, Tata Ruang dan Pertanahan, Bappenas

Geoff, N. (2009). *Lost Art of Walking.* Riverhade Trade. USA. https://www.abebooks.com/9781594484032/Lost-Art-Walking-History-Science-1594484031/plp

Ong, J. O., & Pambudi, J. (2014). Analisis kepuasan pelanggan dengan Importance Performance Analysis di SBU Laboratory Cibitung PT Sucofindo (Persero). *J@ Ti Undip: Jurnal Teknik Industri*, *9*(1), 1-10. https://doi.org/10.12777/jati.9.1.1-10

Patton, M. (2014). *Qualitative Research & Evaluation Methods*. SAGE Publications. Saint Paul, MN. https://us.sagepub.com/en-us/nam/qualitative-research-evaluation-methods/book232962

Pedoman Perencanaan, Penyediaan, dan Pemanfaatan Prasarana dan Sarana Jaringan Pejalan Kaki di Kawasan Perkotaan. (2014). Direktorat Jenderal Penataan Ruang Kementerian Pekerjaan Umum. https://jdih.pu.go.id/detail-dokumen/377/1

Pradono, J., Senewe, F., Kristanti, C. M., & Soemantri, S. (2005). Transisi kesehatan di Indonesia (Kajian data SURKESNAS). *Indonesian Journal of Health Ecology*, *4*(3), 78228. https://media.neliti.com/media/publications-test/78228-transisi-kesehatan-di-indonesia-kajian-d-44a27de3.pdf

Puskarev & Zupan. (1975). *Urban Space for Pedestrian*. The MIT Press. Cambridge. https://mitpress.mit.edu/9780262160636/urban-space-for-pedestrians/

Tuwu, A., & Consuelo G, S. (1993). An introduction to research methods (p. 315). UI-Press. https://opac.perpusnas.go.id/DetailOpac.aspx?id=371495

Shirvani, H. (1985). *The Urban Design Process*. Michigan: Van Nostrand Reinhold. https://www.scirp.org/(S(czeh2tfqw2orz553k1w0r45))/reference/referencespapers.aspx?referenceid=1131926

Slovin, H. U. (2000). Riset Pemasaran dan Perilaku Konsumen Cetakan Ketiga. *Jakarta: PT. Gramedia Pustaka Utama*. https://lib.ui.ac.id/detail.jsp?id=20144565

Sodik, A. (2003). Organisasi: Perilaku, Struktur, Proses. *Terjemahan Nunuk Andriani. Jakarta: Binarupa Aksara*.

Southworth, M. (2005). Designing the walkable city. *Journal of urban planning and development*, *131*(4), 246-257.

https://doi.org/10.1061/(ASCE)0733-9488(2005)131:4(246)

Speck, J. (2012). *Walkable City: How Downtown Can Save America, One Step at a Time*. Farrar. https://www.researchgate.net/publication/276899943_Speck_Jeff_2012_Walkable_City_How_Downtown_Can_Save_America_One_Step_at_a_Time

Suarasurabaya. (2012). *Trem dan Monorel Mulai Pembangunan Fisik 2014*. http://kelanakota.suarasurabaya.net/news/2012/108022-Trem-dan-Monorel-Mulai Pembangunan-Fisik-2014. Diakses 19 Maret 2014

Sugiyono. (2009). *Statistika Untuk Penelitian.* Bandung: Alfabeta. https://staffnew.uny.ac.id/upload/131808329/penelitian/17B_Editor+Buku+Statistik.pdf

Surabaya.go.id. (2014). *World Bank Apresiasi Persiapan Pembangunan AMC*. http://www.surabaya.go.id/berita/index.php?Page_page=9&&tot_Hasil=2452&selSortBy=&txtsearch=&act=. Diakses 19 Maret 2014

Trancik, R. (1986). *Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold

Transportation Research Board. (1985). *Highway Capacity Manual. https://onlinepubs.trb.org/onlinepubs/trnews/rpo/rpo.trn129.pdf*

UU No 26 Tahun 2007 tentang Penataan Ruang. (2007). Sekretariat Badan Koordinasi Tata Ruang. https://peraturan.bpk.go.id/Download/29499/UU%20Nomor%2026%20Tahun%202007.pdf

Wigananda, M. H., & Kartika, A. A. G. (2012). Analisis Kinerja Jalur Pedestrian di Kota Surabaya (Studi Kasus: Jl. Pemuda). *Jurnal Teknik ITS*, *1*(1), E69-E74. http://dx.doi.org/10.12962/j23373539.v1i1.1233

Zahnd, M. (1999). *Perancangan Kota Secara Terpadu: Teori Perancangan Kota dan Penerapannya.* Semarang: Kanisius. https://opac.perpusnas.go.id/DetailOpac.aspx?id=293054