

EXPLORING THE ACCESSIBILITY AND FACILITY IN RAILWAY STATION USED BY PERSONS WITH DISABILITIES: AN EXPERIENCE FROM KEBAYORAN RAILWAY STATION, JAKARTA

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Abstract This paper discusses accessibility at Kebayoran Railway Station's facility for persons with disabilities. Kebayoran Railway Station as one of Railway Stations on Tanah Abang – Rangkasbitung railway track, which has been revitalized in 2016. A descriptive approach used in this research and found that currently, Kebayoran Railway Station has been more accessible for persons with disabilities. The results indicate that some disability's facilities consist of: (a) toilet; (b) safe pick-up and set-down facility; (c) facility for persons with disability; (d) other facility (tactile paving). The Minister of Transportation Decree 47 Year 2014 regarding Minimum Service Standard for Train Public Transportation at Kebayoran Railway Station facilities is one of the guidelines for PT. KAI Commuter Jabodetabek in building facilities in the station. In this case, Kebayoran Railway Station has implemented the Minister of Transportation's Decree and makes it easy for some persons with disabilities to use the facilities at the railway station.

Keywords: Accessibility, Kebayoran Railway Station, KRL Commuter Line, Persons with Disabilities

1. Background

In the millennium era, the mobility of people in a metropolitan city is very massive and also need to fast and safety public transportation. Jakarta as a capital of the Republic of Indonesia is one of capitals in with the worst traffic in the world, therefore the Jakarta government has been provide many alternatives for public transportation, such are: Train (Commuter Line, Mass Rapid Transit, and Light Rapid Transit), Buses (Trans Jakarta, Mini Trans, APTB, and Mayasari Bakti, Metro Mini, Kopaja, etc.), and other transportation (*Bajaj*, *Angkutan Kota*, *Ojek* Online/Online Motorcycle, etc.) The fulfilled of public transportation in Jakarta area is very needed, in order to help people for their mobility from one place to another place to emphasize to effective durability. Currently, Jakarta Province with 5

Cities (Jakarta Selatan, Jakarta Pusat, Jakarta Timur, Jakarta Barat, and Jakarta Utara) and 1 Region (Kepulauan Seribu) have around 10.177.924 people in 2015 (Jakarta Central Bureau of Statistics, 2015). The large number of people in Jakarta also need a big public transport for ideal appropriateness. As the capital of the Republic of Indonesia, the range of mobilization of citizens is very massive. It caused that Jakarta is a central city of business and governmental affairs and also the citizen's interest in Indonesia to live in Jakarta.

Table 1 The Population of Jakarta

City/Region	2010	2014	2015
Kepulauan Seribu	21.414	23.011	23.340
Jakarta Selatan	2.071.628	2.164.070	2.185.711
Jakarta Timur	2.705.818	2.817.994	2.843.816
Jakarta Pusat	895.371	910.381	914.182
Jakarta Barat	2.292.997	2.430.410	2.463.560
Jakarta Utara	1.653.178	1.729.444	1.747.315

Source: Jakarta Central Bureau of Statistics, 2015

One of the most popular public transportation in the Republic of Indonesia is

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Train, which is under authority of State Enterprise, namely: PT. Kereta Api Indonesia (PT. KAI Persero). The train has become the most popular land transportation. The subsidiary of PT KAI Persero, namely: PT. KAI Commuter Jabodetabek is a land transportation surroundings area of Jakarta, Bogor, Depok, Tangerang, until Bekasi. Therefore, the number of passengers in this transportation mode is very high. In 2016, total of PT. KAI Commuter Jabodetabek is 280.588.767 passengers (PT. KAI Commuter Jabodetabek, 2016). This number will be increased in every year due to enhancing all the facilities in the operation of the KRL Commuter Line (Kereta Rel Listrik Commuter Line).



Figure 1 Kebayoran Railway Station
(Source: Private Documentation)

Currently, PT. KAI Commuter Jabodetabek has operating 72 stations with trip coverage 385 km (PT. KAI Commuter Jabodetabek, 2016). This facility will grow up due to the increasing number of passengers every year. Tanah Abang – Rangkasbitung Branch is a commuter railway track in Jakarta, this track connects Tanah Abang Station in Jakarta and Rangkasbitung Station in Banten. The number of stations which operated on this track is 17 stations. One of the stations is Kebayoran Railway Station (KBY), located in nearby Kebayoran Lama Traditional Market. This station is one of potential station because the distance is nearby in such areas in Kebayoran Lama and Kebayoran Baru Sub-Districts. Kebayoran Railway Station is currently revitalized in 2016, the design of the station has also become more modern and larger than previously.

There are several facilities added at the Kebayoran Railway Station and those will

anticipate for the increasing number of passengers in this station. PT. KAI Commuter Jabodetabek also has added several tools of the facility at Kebayoran Railway Station for Persons with Disabilities. The revitalization is expected to can be user-friendly for all passengers of the KRL Commuter Line, which have though Kebayoran Railway Station. Regarding to the background above, the author has entrusted to take the title: **“Exploring the Accessibility and Facility in Railway Station used by Persons with Disabilities: An Experience from Kebayoran Railway Station, Jakarta”**.

2. Literature Review

2.1 Concept of Accessibility

In the public transportation utility, all the passengers have to get equal services on using public transport. In order to accommodate all types of passengers, all public transportation operators should be aware to seek accessibility for that. Valdes in 1998 contends that accessibility means providing flexibility to accommodate each user's needs and preferences. Hence, the others told that accessibility (or just access) refers to the ease of reaching goods, services, activities and destinations, which together are called opportunities. It can be defined as the potential for interaction and exchange (Hansen 1959; Engwicht 1993 in Litman, 2017). Furthermore, The Oxford English Dictionary defines that accessibility as the quality of being able to be reached or entered (Oxford English Dictionary, 2018). Then, Whelan et.al (2006) in Bajada et. al. (2016) contends that accessibility is a necessity for people to reach their destinations, whether they are daily commuters or not. A non-commuting group is the elderly population. Due to age-related circumstances, several elderly persons have to surrender on driving, consequently they become highly dependent on public transport.

From several opinions above, it can be concluded that accessibility is about making easy to use or handle something. Public transportation as a major necessity for citizens should be concerned with the accessibility in order creating public transportation which fine for everyone. The accessibility is not only in inside of transportation mode, but also should be in support facilities, such are: Bus Stop,

Anchorage, Airport, Railway Station, etc. One of the most popular public transportation in Jakarta is the Train or in Jakarta called “KRL Commuter Line Jabodetabek”. The daily number of KRL Commuter Line passengers is touching 766.636 in 2016 (PT. KAI Commuter Jabodetabek, 2016), this is indicating that KRL Commuter Line has just the most popular public transportation in Jakarta.

2.2 Railway Station Accessibility

The accessibility on public transportation or in its supporting facility is very important, in order to get positive impact from citizen who use it. PT. KAI Commuter Jabodetabek as operator for KRL Commuter Line Jabodetabek is one subject to implementing the accessibility on the train and also out of the train (railway station). The accessible of facility affecting passenger satisfaction. Therefore, the train operator should be concerned about it. In line with growth of passengers, PT. KAI Commuter Jabodetabek seeks to enhance facilities which support KRL Commuter Line services. The major facility of the KRL Commuter Line is a railway station. Currently, PT. KAI Commuter Jabodetabek serving 72 stations across Jabodetabek area.

The accessibility on a Train and supporting facility also using parameters as regulated by the Ministry of Transportation of the Republic of Indonesia under The Minister of Transportation Decree 47 Year 2014 regarding Minimum Service Standard for Train Public Transportation. On this decree is very clearly explained about accessible for train facility. In the article 3 under The Minister of Transportation Decree Number 47 Year 2014, the Minimum Service Standard on Railway Station, including:

- A. Parking area
- B. Provide information that is obvious and understandable regarding:
 - a. Visual
 - i. Station layout
 - ii. Number of train, name of train, and its class of services.
 - iii. Departure station, stoppage station, destination station and its schedule.
 - iv. Fare
 - v. Train maps

- vi. Information availability regarding seats on intercity train at station as serving ticket sales.

- a. Audio which is clearly hear by all passengers.

- C. Passenger’s facility
- D. Ticket counter
- E. Waiting room
- F. Boarding gate
- G. Pray room / *Musholla*
- H. Breastfeed room
- I. Toilet
- J. Easy facility for up/down passengers
- K. Facility for persons with disability
- L. Healthcare facility
- M. Safety and secure facility

From those points above, PT. KAI Commuter Jabodetabek should be concerned their facility availability to Ministerial Decree Number 47 Year 2014, especially to provide facility for persons with disabilities. Hence, the detailed information on Minimum Service Standard on Railway Station based on Minister of Transportation Decree Number 47 Year 2014, as follows:

Table 2 Minimum Service Standard on Railway Station

Type of Service	Indicat or	Value/Measure/Amount		
		Big Station	Medium Station	Small Station
Toilet	amount	Male (4 urinal, 3 WC, 1 WC for Persons with Disabilities, and 2 Sinks)	Male (2 urinal, 2 WC, 1 WC for Persons with Disabilities, and 1 Sink)	Male (1 WC, 1 WC for Persons with Disabilities, and 1 Sink)
		Female (6 WC, 1 WC for Persons with Disabilities, and 2 Sinks)	Female (4 WC, 1 WC for Persons with Disabilities, and 1 Sink)	Female (1 WC, 1 WC for Persons with Disabilities, and 1 Sink)
Safe Pick-up and Set-down Facility	accessi -bilty	The height of platform is equal with train floor	The height of platform is equal with train floor	The height of platform is equal with train floor
	accessi -bilty	There is a ramp with 20 ⁰ maximum declivity and the access to connect inter-platform	There is a ramp with 20 ⁰ maximum declivity and the access to connect inter-platform	There is a ramp with 20 ⁰ maximum declivity and the access to connect inter-platform
Facility for persons with disability				

Source: Extracted from Minister of Transportation Decree Number 47 Year 2014 regarding Minimum Service Standard for Train Public Transportation

The government of Indonesia, through the Ministry of Transportation has been regulated about the Minimum Service Standard for Train as a public transportation. It's expected that PT. KAI Commuter Jabodetabek should be aware to provide the best services to all passengers. Minister of Transportation Decree Number 47 Year 2014 also as a major key to make facility in every railway station can approve and excel. Furthermore, from the Declaration of Directors PT. Kereta Api Indonesia (Persero) No. 6 Year 2015 on Minimum Service Standard for People using Train concerned about Minimum Service Standard for Persons with Disabilities on Equality Aspect. Regarding to that Declaration, Equality Aspect is providing facilities for persons with disabilities (Declaration of Directors PT. Kereta Api Indonesia Persero, 2015).

2.3 Kebayoran Railway Station

Kebayoran Railway Station is located at Jalan Masjid Al Huda No.12, Kebayoran Lama Utara, Kebayoran Lama District, City of Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12220. Kebayoran Railway Station located between Palmerah Railway Station and Pondok Ranji Station, this station has 3 active railway tracks for operational KRL Commuter Line Jabodetabek. Historically, Kebayoran Railway Station founded in 1899 with Rangkasbitung – Duri railway track (Studiegroep Zuid-Wet Pacific, 2018). Currently, Kebayoran Railway Station has served only for KRL Commuter Jabodetabek with 4 branches (Studiegroep Zuid-Wet Pacific, 2018), as follows:

- A. Serpong Branch (Serpong Railway Station – Tanah Abang Railway Station)
- B. Parung Panjang Branch (Parung Panjang Railway Station – Tanah Abang Railway Station)
- C. Maja Branch (Maja Railway Station – Tanah Abang Railway Station)
- D. Rangkasbitung Branch (Rangkasbitung Railway Station – Tanah Abang Railway Station)

In 2016, Kebayoran Railway Station has been revitalized with budget RP. 56, 6 Billion (Pratomo, 2016). The revitalization was also implemented to deal with passenger satisfaction. The result of the revitalization of the Kebayoran Railway Station is 3.384 meters square, with 3 platforms throughout 212 meters, 2 floors, and can accommodate 6.609 passengers (Werdiningsih, 2016). The revitalization of the Kebayoran Railway Station is making increased passengers in daily operation. Revitalization also helped persons with disabilities to use the station for their mobility.

3. Methods

This research is a qualitative research. Qualitative research is characterized by its aims, which relate to understanding some aspect of social life, and its methods which (in general) generate words, rather than numbers, as data for analysis (Bricki and Green, 2007). This research is done through descriptive approach. Hence, a descriptive approach is a basic research method that examines the situation, as it exists in its current state (Williams, 2007). The revitalization of Kebayoran Railway Station becomes a modern railway station is an interesting study in terms of accessible facilities for persons with disabilities.

4. Findings

Public transportation is very important in the developing countries, such as Indonesia. Public transportation also brings economic growth with mobilizing people into another place in order to reach out through its operation. Jakarta as a capital of the Republic of Indonesia is urgently needed public transportation, because a bunch of demands from the “Jakartans” (citizens of Jakarta), whose dominant as a workforce. The increasing quality of support facility is also an important factor for public transportation company, in order to encourage number of the passengers.

PT. KRL Commuter Jabodetabek as operator of the most popular of public transportation in Jakarta (KRL Commuter Line) aware that the enhancing support facilities are also very important. Therefore, in 2016, PT. KRL Commuter Jabodetabek has revitalized

several railway stations surrounding Jakarta area. They added toilets, ticket gates, platforms, electricity, etc. They also been added facilities for persons with disabilities, in order to accommodate passengers, who is disabled.



Figure 2 The 2nd Floor Situation at Kebayoran Railway Station after Revitalized in 2016
(Source: Private Documentation)

Beside of that, the main goal of PT. KRL Commuter Jabodetabek is to increase daily passengers, which use KRL Commuter line Jabodetabek.



Figure 3 The View from 2nd Floor with Several Ticket Gate-in
(Source: Private Documentation)

Revitalization needed is also to provide facilities for persons with disabilities. There are several equipment which added in Kebayoran Railway Station, those are toilet, elevator,

escalator, guide block tactile paving. All of which are made to ensure all passengers can use the facility inside the station without any obstacles. Kebayoran Railway Station as a strategic station between 2 Sub-Districts (Kebayoran Lama and Kebayoran Baru) is another reason for the need for revitalization in the old physical station.

4.1 Kebayoran Railway Station General Facilities

Revitalization of the Kebayoran Railway Station in 2016 gives a positive impression to passengers who want to stop at this station. This is indicated by the increasing number of daily passengers who currently range from 8000 to 11.000 people every day from this station. Overall, the number of passengers passing Tanah Abang – Rangkasbitung railway track reaches 820.000 up to 840,000 passengers per day. In the revitalization, this station has spent at least RP. 56.6 billion, which equipped for nursery room and especially for persons with disabilities. The main building at Kebayoran Railway Station is made into 2 floors. The ticketing gates and the vending machines (automatic ticket machine) are placed on the second floor in front side. Hence, the prayer room/Musholla, nursery, room, and the master station room also placed on the second floor in the right side. And the last the toilets (ladies and gent) are placed in every corner on the second floor.

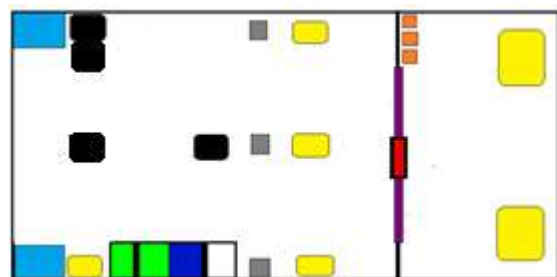


Figure 4 The 2nd Floor Sketch
(Source: Made by Author)

Explanation:

- A. Black : Escalators
- B. Dark Blue : Nursery Room
- C. Green : Pray Room / Musholla
- D. Grey : Elevators
- E. Light Blue : Toilets
- F. Orange : Vending Machines

- G. Purple : Ticket Gate in & Gate out
- H. Red : Security Room
- I. White : Master Station Room
- J. Yellow : Stairs

From the Sketch above, the box with black color are escalators. Kebayoran Railway Station has 4 escalators. Next, the dark blue room is in the nursery room, this room is functioned for passenger which is she wants to breastfeed. In terms of pray room (*Musholla*), Kebayoran has 2 pray rooms which divided between male and female. These pray rooms are colored with green. Kebayoran also provide additional passengers mover machines, namely the elevators which grey colored. Here, they operate 3 elevators in every railroad platform. Afterwards, the existing of toilet in public space is very important. Therefore, Kebayoran Station as one of public space areas provide 2 toilets for man and ladies on the second floor which is light colored.

In terms of ticketing, Kebayoran Railway Station also providing automatic ticket machine, which located on the Figure 3 in Orange colored. Kebayoran has 6 vending machines. These machines are more efficient and effective, then buying at counter ticket (manual). And then, the purple colors are functioned for gate-in and gate-out. Kebayoran has 7 ticket gate-in and also 7 ticket gate-out. Furthermore, the red box is about security station room. The white room is for the master station room. And the last yellow boxes, these are just ordinary stairs which connected 1st floor and 2nd floor.

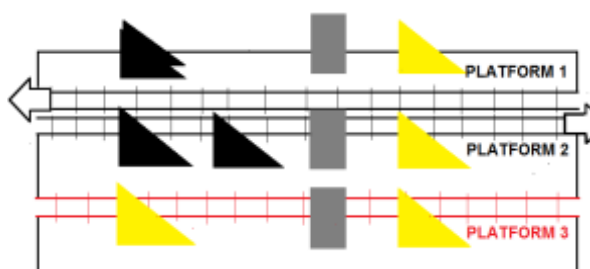


Figure 5 The 1st Floor Sketch with 3 Railroad Platforms

(Source: Made by Author)

Hence, from the railroad platform which is viewed on the Figure 4 above, Kebayoran Railway Station has around 3 active railroad platforms. Railroad platform 1 is operated to Tanah Abang Railway Station (next station is

Palmerah Railway Station) and the railroad platform 2 to Rangkasbitung Railway Station (next station is Pondok Ranji Railway Station), while railroad platform 3 is not operated for operational KRL Commuter Line (additional railroad).

4.2 Accessible Facilities for Persons with Disabilities

As a public space area, Kebayoran Railway Station is aware to provide accessible facilities for persons with disabilities. Therefore, according to the Minister of Transportation Decree Number 47 Year 2014 on Minimum Service Standard for Train Public Transportation, there are several points for railway station, which is making the Kebayoran Railway Station is friendly to all passengers, including passengers with disabilities. Those with several facilities are:

A. Toilet

Furthermore, the sanitation facility also important in a public space area, such as in railway stations. Kebayoran Railway Station has provided public toilet for passengers in station. The existence of public toilet is located on the 2nd floor of Kebayoran Railway Station building. For gent toilet, there are 3 WC, 6 urinals, and 2 sinks. The toilet facilities (WC) provided at Kebayoran station are also in the form of a sitting toilet. This toilet is very useful for the ease of persons with disabilities in take a leak. Regarding to the Minister of Transportation Decree Number 47 Year 2014, existing toilets at Kebayoran station are in accordance with the Minister's decree.

B. Safe Pick-up and Set-down Facility for Passengers

The facility for pick-up and set-down passengers is one of the important facilities in the world of public transportation, especially on trains. This facility in the railway is called a platform. It is this platform which connects the station to enter the train. Due to the Minister of Transportation Decree Number 47 Year

2014, the height of the station platform must be the same as the height of the carriage floor. In this case, Kebayoran Railway Station has facilitated platforms that match the height of the train floor.



Figure 6 Safe Pick-up and Set-down Facility (Platform) at Kebayoran Railway Station
(Source: Private Documentation)

C. Facility for Persons with Disability

i. Elevator

After revitalized, Kebayoran Railway Station is become 2 floors of its main station building. Second floor is the most important for passengers to get into a railway station. Therefore, in order to make easy passengers with disabilities in mobilizing inter-floor, Kebayoran has made 3 elevators for passengers moving on. Terminologically, an elevator is a platform or compartment housed in a shaft for raising and lowering people or things to different levels (Oxford Online Dictionary, 2018).

Elevator also serves to facilitate passengers with disabilities in moving floors. The existence of the elevator is a must, if a railway station has more than 2 floors. It was known that Kebayoran Railway Station after being revitalized in 2016 has 2 floors in operational station whole. According to Minister of Transportation Decree Number 47 Year 2014, especially on Article 3 about Minimum Service Standard in Railway Station, the elevator is required as a facility for persons with disabilities.

This is actually an evidence of the Kebayoran Railway Station to commit on Minister of Transportation Decree No. 47 Year 2014. However, in reality, it is often found that elevator operations

are limited by reason of "under maintenance" for 2 last months. It is surprising for passengers who want to use this elevator, why? Because all elevators (3 elevators) are completely unusable for the same reason. Namely still under maintenance.



Figure 7 The Elevator on 2nd Floor at Kebayoran Railway Station
(Source: Private Documentation)

ii. Escalator

Different with elevator, the escalator is still shaped as stairs. Escalator is a moving staircase consisting of an endlessly circulating belt of steps driven by a motor, which conveys people between the floors of a public building (Oxford Online Dictionary, 2018). Kebayoran Railway Station has made 4 escalators, 2 (up and down) on the railroad platform 1 and other on the railroad platform 2. These escalators are automatically shut down, when there is no passenger through it. Procurement is also a major requirement for train stations that have more than 1 floor. According to Minister of Transportation Decree Number 47 Year 2014, the escalator is a facility for persons with disabilities and this makes Kebayoran Railway Station conformity points in facilitating physical stations with escalators pointing to platforms 1 and 2, which are the stops where KRL train Commuter Jabodetabek.



Figure 8 An Escalator on 2nd Floor at Kebayoran Railway Station
(Source: Private Documentation)

D. Other Facility

Visually impaired people usually need assistance to reach their destinations in indoor and outdoor environments. (Sahin, et. al., 2015). Therefore, the facility for visually impaired people is need on public space areas, such in railway stations. Historically, tactile paving the original tactile paving was developed by Seiichi Miyake in 1965 (Sakaguchi, et. al., 2000). Tactile paving is a textured tile used by visually impaired persons to recognize streets and hazardous surface or grade changes. The other facility for persons with disabilities at Kebayoran Railway Station is about the yellow line (tactile paving). Almost all areas of Kebayoran Railway Station have been equipped with this facility.



Figure 9 Tactile Paving Sample at Kebayoran Railway Station
(Source: Private Documentation)

Kebayoran Railway Station is one of the Commuter Line KRL train stations that is friendly to people with disabilities after revitalization in 2016. Some special support facilities for people with disabilities, namely: toilets that facilitate people with disabilities (WC sitting), platform stations are made evenly with the floor trains, and the presence of elevators and excavators, as well as other facilities such as tactile paving. All these facilities are made after the revitalization of the main building Kebayoran station in 2016. Thus Kebayoran Railway Station will give a good impact for all passengers, especially passengers with disabilities.

5. Conclusion

From the findings in this study, it can be concluded that Kebayoran Railway Station is one of the best Jabodetabek KRL stations for persons with disabilities, it caused Kebayoran Railway Station has provided some hospitable facilities for people with disabilities. However, Kebayoran Railway Station has not fully implemented the Minimum Service Standard accordingly the Minister of Transportation Decree Number 47 Year 2014. One of the facilities that is still not maximally operating, namely elevators station. All three of these elevators have not been operating since last 2 months under the excuse of "under maintenance". Therefore, passenger wheel-chair disabled persons will be difficult to move inter-floors. According to the conclusion above, Kebayoran Railway Station must report it to the related party (PT. KRL Commuter Jabodetabek / Central) to be followed up handling of the damaged elevator.

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