# **Back to Public Transport National Movement; Light Rail Transit Accessibility in Palembang**

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#### **ABSTRACT**

The launch of the National Movement Back to Public Transportation program in South Sumatra by the Ministry of Transportation is intended as the pilot project for urban community in Indonesia to daily use the public transportation services. The pilot project is using Palembang Light Rail Transit to reduce congestion and air pollution from motor vehicles. The easy accessibility of public transportation in big cities for the public is the main focus of this national movement. This research used qualitative method by analyzing the literature review of previous researches. The result shows that the implementation of the National Movement Back to Public Transportation program needs to pay attention to some factors as safety, comfort, and reliability of the public transportation as the mass transportation. Those factors could impact on increasing the passengers of Palembang Light Rail Transit per day. Cooperation and support between the central government, the local governments, and the Indonesian Railway companies are needed to improve public transportation services, develop Light Rail Transit accessibility, and mobilize the people to use and preserve the LRT.

**Keywords**: accessibility, light trail transit, national movement, back to public transport, services

## A. Introduction

Public transportation is a mode of mass transportation that provides easy access to the public to reach their destination. The construction of transportation networks is now still the focus of development by the government (Pramana, 2018). The writing of this article aims to find out the efforts made by the government to improve Light Rail Transit (LRT) services in Palembang City so that it can become one of the preferred modes of public transportation in facilitating community mobility. This is related to the government's program to invite people in the National Movement Back to Public Transportation socialized by the Minister of Transportation to return to using buses and trains (Biro Komunikasi dan Informasi Publik, 2022b).

Mobility is measured by actual movement in the form of the number of trips made or the total kilometers traveled. Ease of access to facilities and infrastructure to support mobility can increase people's anomalies to use public transportation. Mobility facilities that are easily accessible will make the destination easier to reach (Saif et al., 2019). The relationship between the individual and sociality is necessary for daily needs. Related to supporting social mobility, public transportation infrastructure is needed to increase the physical growth of cities because community connectedness both physically, socially, and economically is a fundamental problem. Public transportation infrastructure is one of the instruments to create connectedness and control between centers of social activities (Pramana & Efendi, 2019). The public transportation system is said to be good if in an urban area mobility increases because the increase in the use of public transportation also increases because accessibility is easier (Valentine et al., 2020). According to Zafira et al., (2022). The construction of a good transportation network is one of the factors needed for community mobilization so that efforts to facilitate the movement of people and goods from one place to another have an important role in the development of an area. LRT in Palembang City is included in the government's National Movement Back to Public Transportation program as one of the modes developed both in terms of facilities, infrastructure, facilities, and systems that will facilitate public access (Magdalena & Akustia, 2021).

In previous studies, evaluations have been carried out by the community as a form of feedback on Palembang LRT services and facilities both in terms of satisfaction with officer services, facilities available for pregnant women, children and disabilities, information services related to arrival and departure schedules, officer response, and easy access to LRT stations (Anisah et al., 2020). The provision of intermodal integration at the Palembang LRT station and the guidelines for service standards for transfer facilities are also one of the things that need to be improved by service providers (Magdalena & Akustia, 2021). The socialization of the National Movement back to Public Transportation can be fairly new because the Ministry of Transportation conveyed this in early 2022. The study that the author conducts will focus on analyzing the efforts made by the Ministry of Transportation and PT. Indonesian Railways (KAI) in running the National Movement Back to Public Transportation program for the development of Palembang LRT in South Sumatra. Palembang was chosen to be one of the locations for the application of the National Movement Back to Public Transportation program because it has complete mass transportation, both road and rail transportation (Biro Komunikasi dan Informasi Publik, 2022a).

Mass public transportation that has easy access and provides supporting facilities

and services can be the preference of the community in carrying out daily mobilization (Saif et al., 2019). The invitation to use public transportation continues to be encouraged by the Ministry of Transportation or Kementerian Perhubungan which continues encouraged to encourage efforts to improve the performance of mass transportation and socialize the use of public transportation through the National Movement back to Transportation (Biro Komunikasi Public dan Informasi Publik, 2022c). Analysis of the National Movement Back to Public Transportation program in the development of Palembang LRT is needed to see what efforts have been made by the Ministry of Transportation and KAI in improving the operating system and service system of Palembang LRT. This research uses qualitative methods to obtain study analysis data through literature studies or Literature Review of previous article writing. The initial hypothesis in this development is that the improvement of the Palembang LRT system and services has implemented and made various efforts to achieve service standards and complement the existing shortcomings. Improvements made can be in the form of revitalization, information service programs, easy access to arrival and departure schedules, or ease of payment by utilizing smart card technology.

Mass public transportation is defined as a public transportation service that is available to the public either in general or specifically in the provision of public services there are four elements of the service process, namely the service provider as a party who provides services to the public, be it the service provider of goods or services, the recipient of the service, namely consumers or customers who receive goods and services. Type of service, namely the form of service provided by the service provider to consumers, as well as customer satisfaction, which is a reference or purpose owned by the service provider in the process of providing the type of service to the recipient of the service (Dwitasari & Priyanto, 2016).

Accessibility is defined in the form of a concept of transportation planning for an area

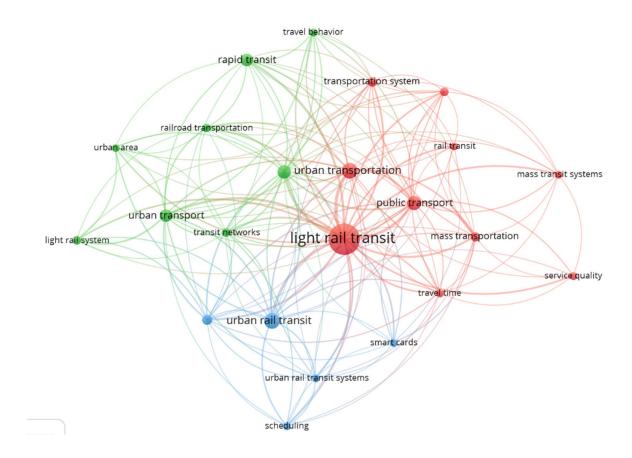
that aims to provide convenience in achieving goals where in the process it prioritizes aspects of quality and quantity of community connection activities with the existence of a transportation system (Devi, 2019). The level of accessibility of public transport is measured through several basis assessments, namely transportation accessibility based on distance and travel time, accessibility based on the concept of geographic time, accessibility based on cost approach, accessibility based on maximum utility theory, accessibility based on related access measures, and accessibility based on assumptions of travel choices related to cost, time, comfort, and safety (Saghapour, 2017). This basis is a consideration in developing public transportation in urban areas so that accessibility has an important role as a reference and the purpose of realizing accessibility in planning and developing a public transportation system (Devi, 2019).

The construction public transportation facilities and infrastructure is the focus of the government in facilitating community activities, public transportation facilities that are easily accessible can be said to be accessibility by looking at the distance of access to the location and traffic flow (Devi, 2019). In addition, according to Sefaji et al., (2018) There are several other factors that affect the distance of achievement in the accessibility indicator, namely travel time, travel costs, land use intensity, and income of travelers, this indicator is a reference for the government in building a public transportation infrastructure by considering supporting factors and taking into account obstacles that affect accessibility achievement.

The Ministry of Transportation created a joint program with the central and local governments to support the use of public transportation called the National Movement back to Public Transportation which aims to optimize the use of public transportation by the public to reduce congestion problems in the future (BUMN, 2022). Through the National Movement Back To Public Transportation program, the government seeks to invite people to use public transportation modes such as buses or trains, this program campaign

is intensified by the government with the aim of unraveling the high congestion problem, reducing air pollution, and reducing the rate of traffic accidents by the use of private vehicles (Kemenhub Sosialisasi Gerakan Nasional Kembali ke Angkutan Umum, 2022). The challenges for big cities are how to reduce the increase in pollution and emissions due to motor vehicles, as well as global warming that has an impact on the public environment. So that a solution is needed regarding the emphasis on the use of private vehicles in the form of cars or motorcycles which from year to year the number is increasing, this is a consideration for the government to realize sustainable mobility and transportation so that it can have an effect on the environment, economy, and public health (Saif et al., 2019). One of the modes of public transportation that is used as the government's target is trains, LRT as mass transportation to become public transportation used in this program by improving the quality of services and transportation services to achieve optimal use of LRT (BUMN, 2022).

Based on figure 1 of the analysis of the linkage of research studies or articles on LRT. LRT has a connection with urban transportation, mass transportation, urban areas, and travel behavior. This is shown by the results of mapping images that intersect between some of these aspects in the research and analysis of the discussion of the previous article. The government started the National Movement Back to Public Transportation program by launching a program by the Minister of Transportation, in Palembang City, South Sumatra Province in early 2022 (Situmorang, 2022). Palembang was chosen as a pilot location in the National Movement Back to Public Transportation program because it was considered to have a fairly complete public transportation mode of facilities, both land transportation, water transportation, and air transportation, one of which was the Palembang LRT which had an increasing level of use in the range of 2018 to 2021 but in 2022 it decreased due to non-cash payment rules at Ampera Station (Situmorang, 2022). PT Kereta Api Indonesia provides full



Source: VOSviewer (2022)
Figure 1 Bibliometric Articles about Light Rail Transit Study in 2018-2022

support for the sustainability of the National Movement Back to Public Transportation program by providing commercial areas and tenants for Palembang LRT passengers as a form of improving facilities and comfort, and PT KAI issued subscription cards that integrate with other modes of public transportation such as Bus Rapid Transit and City Transportation to facilitate passengers in intermodal changes (BUMN, 2022).

The National Movement Back to Public Transportation program is expected to invite people to return to using public transportation because by running this campaign, the realization of a mental revolution in the community to increase interest and habits in using public transportation compared to private vehicles is growing (Daya, 2022). The central government together with the local government and also PT KAI is carrying out efforts to improve the performance of public transportation and supporting facilities to

realize the comfort and safety of passengers with this invitation campaign, the government has hopes that people can take advantage of public transportation by becoming users of public transportation such as LRT in order to reduce the level of congestion by using private vehicles (Biro Komunikasi dan Informasi Publik, 2022c).

# B. Methods

This research uses qualitative methods to obtain study analysis data through literature studies of previous article writing. The data used is the writing of articles related to public transportation accessibility, previous research articles, and national online news sources regarding the National Movement Back to Public Transportation and LRT programs in Palembang. The information that has been obtained will be analyzed to find out the alignment of the development of the National

Movement Back to Public Transportation and Palembang LRT program that is being run by the government.

## C. Results and Discussion

Public transportation as the focus of government development, both central and local governments, continues to take place and is improved to achieve ideal achievement indicators for integrated public transportation and in accordance with the purpose of holding public transportation for community mobility. The public transportation system can be said to be ideal if it has easy access for passengers. this is important because with easy access public transportation, the opportunity to build people's habits in utilizing public transportation modes will be easier to realize. The accessibility of public transportation also determines the increasing number of mobility in an area due to the increase in the use of public transportation modes. This is one of the references for the construction of public transportation facilities and infrastructure in an area, both land transportation, water transportation, and also air transportation that facilitates the movement of people from one place to another.

The implementation of public transportation in each region to facilitate community mobility, both facilities and infrastructure are tailored to the needs of the community, both the quality of the fleet and transportation services continue to be improved to provide optimal and satisfactory results. Transportation modes such as LRT are one of the preferred modes of public transportation which in technical terms and services are still being developed by Kereta Api Indonesia.

Base on Dwitasari & Priyanto, (2016), it can be concluded that there are factors that are needed by LRT users, first in the safety service factor, LRT users hope that service providers can ensure passenger safety, passenger security, and passenger comfort while using these public transportation services. Second, the accessibility factor or convenience, this includes ease of integration between modes, easy accessibility to shelters/stations, and

the availability of park n ride facilities that can support the ease of transportation change for passengers. While the third factor is the reliability factor, in this factor passengers expect the accuracy of the departure and arrival schedules of public transportation modes that are arranged or scheduled as well as the affordability of travel costs for public transportation users which is related to the socio-economic condition of passengers.

Passenger satisfaction is an important thing that needs to be considered by service providers because the impression of related public transportation services and services will have a significant impact with a graph of the number of passengers and enthusiasts for public transportation services. Things that need to be considered in providing public transportation services are accessibility, capacity, punctuality, safety and comfort. The improvement efforts made by public transportation service providers cannot be proven to be successful if there is a lack of government invitation to use public transportation, therefore the government through the Ministry of Transportation created a program to re-promote the current public transportation.

The Ministry of Transportation created a program called the National Movement Back to Public Transportation which aims to invite the public to be able to take advantage of and use the modes of public transportation that are already available and developed by the government. In this program, the government has high hopes that people can minimize the use of private vehicles such as cars or motorcycles in carrying out daily mobility. Public transportation such as land transportation, water transportation, and air transportation that are available are still being developed, and currently can be used as an alternative for people to travel and make it easier for them to move from one place to another.

Palembang was chosen as a pilot location for The National Movement Back to Public Transportation program because it was considered to have complete public transportation both land, sea and air

transportation and was considered good enough by the government so that Palembang became the big city of choice. National Movement Back to Public Transportation also targets public transport such as buses and trains as modes of public transportation that will be promoted in this program, LRT is the initial mode in this program for the implementation of National Movement Back to Public Transportation. LRT in Palembang has a fairly good performance so that this mode of transportation has become a land public transportation that was promoted in the movement of the ministry of transportation this time. The Ministry of Transportation collaborates with the central government and the regional government of South Sumatra to support the implementation of National Movement Back to Public Transportation, the government makes efforts in the form of invitations to the public to use public transportation services, especially LRT, in the mobility of people's daily activities.

The initiation of National Movement Back to Public Transportation is also a form of campaign and the government's efforts to reduce congestion that occurs in big cities due to the high level of use of motor vehicles such as private cars and motorcycles. This adds to the volume of vehicles on the road and also not infrequently causes long traffic jams. The large number of motor vehicles that operate daily increases vehicle exhaust emissions and air pollution, this air pollution is an environmental problem, especially global warming. Therefore, public transportation such as LRT is sought to be utilized as carefully as possible, especially in big cities such as Palembang which in the future can become sustainable public transportation.

The implementation of the National Movement Back to Public Transportation program has the full support of KAI which helps in improving Palembang LRT services. KAI also directly reviews the program and provides improved services such as procurement of commercial areas, tenants, and also the development of facility services to create convenience and comfort for passengers. KAI applies two payment

methods for Palembang LRT tickets, namely the cash method and issuing an Electronic Re-Card or Kartu Ulang Elektronik and LinkAja for cashless payments.

From 2018 to 2021, Palembang LRT passengers increased every year, but due to the Covid-19 pandemic, the number of passengers decreased due to social mobility restrictions. This has a big impact on Palembang LRT operations. In an effort to prevent the spread of Covid-19, the implementation of health protocols that are in accordance with government recommendations such as wearing masks, maintaining distance both at stations and inside the LRT, and washing hands have also been implemented. In addition, the LRT station has implemented the use of the Peduli Lindungi application to maintain the safety and comfort of the community during the new normal transition period. In addition, supporting facilities for passengers with disabilities, the elderly, and pregnant women are important details that need to be considered so that passengers can be created comfort while using LRT services.

The level of Palembang LRT users had decreased and increased again after the National Movement Back to Public Transportation program, in 2021 the total passengers of the South Sumatra LRT were 1.598.665 with an average of 4.380 customers per day, this number increased by 51.7% compared to 2020 which was 1.053.492 and in the period from January 1 to February 28, 2022, the average South Sumatra LRT service user was 5.773 per day (BUMN, 2022). With the results of this increase in LRT passengers, the efforts of the central government, local governments and parties related to this program are not in vain. Development and improvement of public transportation services continue to be carried out to meet the safety, accessibility, and reliability indicators that should be met by public transportation service providers.

Accessibility is an important factor to support the running of the system and public transportation operations. The ease of the public to obtain services and their use will support the increase in the number of public transportation passengers or in this program, namely the Palembang LRT. The development of adequate and systematic LRT infrastructure and infrastructure will be a consideration for the public to take public transportation again as an alternative mode of transportation compared to having to use private vehicles. Practically, the services provided will attract passengers to subscribe using Palembang LRT services.

The presence of the National Movement Back to Public Transportation program is a form of a campaign calling for public transportation to take public transportation again in large densely populated cities that also have a high level of community mobility. In addition to the government's efforts to recreate the design of the program, the public is also expected to provide responses and feedback on this program. Criticism and suggestions are needed in the evaluation of the National Movement Back to Public Transportation program, as well as the level of public awareness to want to change together with the government is the intention of the National Movement Back to Public Transportation program to be held so that the development of public transportation is more targeted.

Public transportation services also have a big role in realizing the government's goals in the National Movement Back to Public Transportation program, things about public services can run well if there is a difference between availability and demand to meet people's needs for movement or mobility that is increasing from one place to another (Dwitasari & Priyanto, 2016). Public transportation becomes more effective if the transportation system can meet the carrying capacity and can provide smooth, safe, comfortable, and economical services for passengers so as to create efficiency of reduced public burden while using these public transportation services. The realization of this integrated service system will realize the objectives of organizing orderly and efficient road transportation, integrating transportation modes that are interchangeable, reaching all land areas, supporting equity, and supporting the realization of national development (Ariesandi et al., 2020).

#### D. Conclusion

The use of public transportation is again encouraged by the government through the National Movement back to Public Transportation program as one of the government's efforts to reduce the level of congestion and air pollution in big cities. Light Rail Transit Palembang became a pilot for the implementation of this program and succeeded in helping to increase the number of Palembang LRT passengers per day. Palembang LRT accessibility is an important focus of the government to improve public transportation services so that the National Movement Back to Public Transportation program can encourage public interest in returning to using public transportation in the daily mobility of urban people. Novelty from this research is analysis specifically in National Movement Back to Public Transportation in how the program solve the problem of traffic jam in urban area.

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