

# Transportation Levels in the Lampung Province in Realizing Ordered, Safe and Smooth Transportation

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## Abstract

Transportation as the lifeblood of the nation and state carries out its function as a driver, driver and supporter of development. Transportation is a system consisting of facilities and infrastructure supported by management and human resources, forming an infrastructure network and service network. The formulation of the problem in this research is what are the Issues in the Lampung Transportation Sector? (2) What is the Transportation Sector Policy for Lampung Province? The method used is descriptive qualitative, with data sources obtained from books, articles and related journals. The results of this research are that issues in the Lampung transportation sector include several crucial aspects that need attention. First, road infrastructure is still a major concern, especially in terms of maintaining and developing a fairly extensive network. Congestion often occurs at a number of points, especially in big cities such as Bandar Lampung, due to the increase in the number of vehicles. Apart from that, public transportation services, such as buses and microbuses, also need to be improved so that they are more efficient and can better meet people's needs. Providing alternative transportation, such as river transportation, needs more attention to reduce the burden on land transportation. The transportation sector policy for Lampung Province focuses on developing infrastructure and better transportation services to increase mobility and support economic growth and community welfare. The Lampung Provincial Government focuses on building and maintaining roads, bridges and public transportation such as buses and microbuses. Apart from that, the development of river and sea transportation is also a focus to reduce congestion on land roads.

Keywords: Regional Transportation Information; Infrastructure

## Introduction

Transportation has a very important role in supporting the economic growth of society and is the lifeblood of a country's economic development.<sup>1</sup>Therefore, successful development in the economic

Transportation Levels in the Lampung Province in Realizing Ordered, Safe and Smooth Transportation

<sup>&</sup>lt;sup>1</sup>Zahra, K., Riris Hotma Roito Manalu, Rana Nabillah, & Putri Kemala Dewi. (2024). Analysis of the Impact of Road Infrastructure Development on the Economic Growth of Medan Tembung District. El-Mal: Journal of Islamic Economics & Business Studies, 5(3), 1857–1866.

sector must be supported by the development of a good transportation system,<sup>2</sup>according to the needs and developments of the times. The economic benefits of transportation include:

- 1. Distribution Benefits. Goods can be sent from the production site to other places that need these goods.
- 2. Benefits of maintaining price stability of goods. Transportation makes the supply of goods easier and more secure so that the price of goods will remain stable.
- 3. Increasing the economic value of an area/region. Transportation increases the productivity and selling value of an area, for example industrial products, agricultural products, land, etc
- 4. Regional Development. Transportation can accelerate the development of a region, transportation limitations hinder regional development.

Transportation as the lifeblood of the nation and state carries out its function as a driver, driver and supporter of development.<sup>3</sup>Transportation is a system consisting of facilities and infrastructure supported by management and human resources, forming an infrastructure network and service network. The forms of elements involved in the transportation system, including facilities, infrastructure and movement, include feasibility, certification, signage, navigation, human resources, geography, demography and others.

Development of the transportation sector, which includes 3 dimensions, namely land, water and air, is very necessary to meet the mobility needs of people and goods in the future.<sup>4</sup>Of course, by adapting the development concept to future challenges. For example, transportation development must be energy efficient, environmentally friendly and have a major economic impact on community welfare and regional progress. Therefore, smart transportation, green and sustainable transportation are important issues that must be accommodated in Lampung's transportation planning documents. Of course, technological adaptation is greatly influenced by the high mobility of people and goods which has an impact on high regional income. Because, with high and adequate regional income, it will strengthen the local government's ability to provide various kinds of modern, high-tech, high benefit and smart and green transportation infrastructure. Translating all this into regional transportation planning will be a tough challenge for planners and regional governments as implementers. However, this must still be adopted so that Lampung can continue to survive amidst disruption in the transportation sector.

The success of development is largely determined by the role of the transportation sector. Therefore, the National Transportation System (Sistranas) is expected to be able to produce transportation services that are highly capable and implemented efficiently and effectively in supporting and at the same time driving the dynamics of development,<sup>5</sup>supporting the mobility of people and goods and services, supporting national distribution patterns, as well as supporting regional development, improving national and international relations that further strengthen the development of national and state life in the context of realizing the Archipelago Insight.

However, in reality there are various transportation inefficiencies in Lampung Province which are reflected in the high logistics costs which are reflected in the high prices of locally produced commodities, the occurrence of traffic jams at certain moments and events, there are areas where

<sup>&</sup>lt;sup>2</sup>Syntha Noviyana, Komsi Koranti, Gunadarma Sriyanto, Athallah Nigel Wijaya. 2024. The Influence of Liquidity, Leverage and Profitability Ratios on Financial Distress in Transportation Sub-Sector Companies. Journal of Economics & Sharia Economics Vol 7No 1

<sup>&</sup>lt;sup>3</sup>Roselina Rahmawati. 2019. Calculation Analysis and Comparison of Vehicle Operational Costs (Bok) Medium Bus Type J 05 123 Cc with Big Bus Type J 08 E – Uf (Corridor 1 Pakupatan – East Serang – West Serang). Construction And Materials Journal 1(2)

<sup>&</sup>lt;sup>4</sup>Boy Grace. 2022. "Empowerment of the Indonesian National Navy in the Context of Strengthening National Defense". Journal of Development Policy 17 (1), 151-66.

<sup>&</sup>lt;sup>5</sup>Irwan Ar. 2013. Performance Analysis of the Collector Road Infrastructure Network for the Impa-Sengkang and Sengkang-Ulugalung Sections of Wajo Regency. Hasanuddin University Makassar thesis

transportation access is relatively poor due to the lack of alternative transportation modes and various transportation problems. other. These various problems are more due to the various transportation potentials in Lampung Province not being utilized optimally. As a driving element in development, transportation functions to provide effective transportation services to connect isolated, underdeveloped and bordering areas with developing areas outside the region, resulting in synergistic economic growth. Sistranas is essentially a Transportation Development Concept in a systemic approach that integrates resources and facilitates efforts to achieve national goals

In this case, it is important to continuously strengthen the linkages between functions or activities with each other, both directly and indirectly, with the implementation of transportation at the National Transportation Level (Tatranas), Regional Transportation Level (Tatrawil), and Local Transportation Level (Tatralok). In this regard, it is necessary to develop a system at the Regional Transportation Level (Tatrawil) so that direction can be obtained for the development of service networks and infrastructure networks that can play a role in supporting the regional economy and encouraging the growth of underdeveloped areas, both at local, provincial and national/international levels.

The existence of toll roads, over-dimensional overloading trucks, the presence of coal trucks, damage to provincial roads in certain segments (relatively dominant, especially in plantation areas), the development of air transport, especially to support economic activities, tourism and disasters, must be answered in this document, although they are still in the form of macro planning directions. Then, the lack of development of public transportation both in terms of routes, the readiness of the road network and limited investment in transportation by companies that are members of Organda, as well as the non-functionality of several hubs in Lampung, especially several stations, piers and terminals, need attention in this writing.

#### Discussion

#### 1. Issues in the Lampung Transportation Sector

#### a. Land Transportation

Highways are one of the infrastructures that are the main key in movement and mobility in an area, both in land transportation itself, and as a connector between other transportation to air and water transportation.<sup>6</sup>The performance of the road network in Lampung Province is one aspect that needs to be considered because it is directly related to mobility activities, including the economy. To accommodate future transportation services, it is necessary to develop a traffic network and road transportation to support connectivity between modes of transportation, the development of which requires a reference to achieve balance with limited government funding. Field conditions show that issues related to road damage are still felt and exist in Lampung Province.

There are still many roads in Lampung Province that are in the damaged and seriously damaged category. In 2019 the number of roads damaged reached 41.82% or 8682 km. Then, in 2020 there was a decrease of around 2% to 39.45% or as many as 8189 roads were categorized as damaged and seriously damaged. Lampung Province, as one of the provinces in Indonesia, still has several problems in providing and improving roads in several areas. Based on factual conditions to date (as of 2022), many main roads in Lampung Province are still found to be damaged, and even at some points there are still no signs indicating that the roads will be repaired, so the negative risks for road users tend to be high. In 2021, the Lampung Provincial government has started working on road repairs on priority sections with the potential to boost the economy. There are around 24 priority roads included in the work projections and 2

<sup>&</sup>lt;sup>6</sup>Kurnia Novianti and Choerunisa Noor Syahid. Towards a Smart City: Lessons from the Smart City Concept Applied in Jakarta and Surabaya. Spatial Planning Day

Transportation Levels in the Lampung Province in Realizing Ordered, Safe and Smooth Transportation

of them are Ryacudu Road which is located in Bandar Lampung City and Pugung Raharjo Road which is located in East Lampung.

Ryacudu Road received a package ceiling value sourced from the Regional Revenue and Expenditure Budget (APBD) of Lampung Province, amounting to IDR 18,561,120,000. PT Djuri Teknik won the work with a total road length of 1.5 km and a width of 8 meters. Meanwhile, for handling the Pugung Raharjo road, East Lampung in 2021, the BMBK Service will cover a 10.3 km long road. For a total of 26.4 km of road, however, 10.3 km of the road was badly damaged and had to be repaired. On the Bandar Lampung - Metro, Bandar Lampung - Natar roads and also several sections in Bandar Lampung City, the roads are damaged with potholes and bumps scattered at many points with the worst potholes reaching 15 cm to 20 cm deep. Apart from that, there are also cases where the asphalt is peeling and has a wave texture due to the large number of trucks carrying overloads or exceeding capacity, which worsens the damage to the road asphalt. In fact, some residents have tried to take the initiative to repair it by patching up the road using soil, but when it rains the road again becomes damaged and collapses.

The district that is attracting attention is North Lampung Regency. In 2021, the Head of the North Lampung Public Works and Spatial Planning (PUPR) Department stated that the condition of roads in North Lampung Regency experienced serious damage of more than 50%. This was made worse by the lack of infrastructure development in the years before 2021. The damage exceeding 50% is a percentage of around 700 roads in North Lampung Regency. This has become an urgency for resolution and solutions to anticipate the crippling of the economy due to difficulties in mobility or access.

Tanggamus Regency, Limau District, Tanggamus Regency has also complained about the condition of the roads across Lampung Province from Pekon Badak, Pekon Banjar Agung, Pekon Ampai, Pekon Pariaman, Pekon Antar Brak and Tanjung Siom which have been badly damaged. Overall, information was obtained that 14 roads in Lampung Province would be repaired using PT SMI loan funds. The 14 roads belonging to Lampung Province reach a length of 280 km. The total funds borrowed from PT SMI reached 569 billion for the construction of 14 priority roads.

#### b. Toll Road

Lampung province has a strategic role in the connectivity of the national road network, so a good transportation policy is needed that is able to have a positive impact on the economy. One of the important roads is the West Sumatra Cross Road which is one of the national access roads that passes through Lampung Province. This causeway has a core role in the process of mobility of passengers and logistics of goods originating from Java Island through connecting several main activity centers such as the National Activity Centers of Bandar Lampung, Bengkulu, to Banda Aceh and also connecting Local Activity Centers such as Krui (Lampung Province) to Aceh Singkil (Nanggroe Aceh Darussalam Province).

Based on the results of research conducted by Michael et. all (2021) regarding the West Cross Road, especially in four City/Regency areas including Bandar Lampung City, Pringsewu Regency, Pesawaran Regency, and Tanggamus Regency with a total corridor length of 85.00 Km, it was found that the conditions and characteristics of the West Cross Road Sumatra, especially the Kemiling-Tanggamus corridor, has quite good road conditions. This crossroad has a slightly narrow road width, making it easy for traffic jams to occur at certain points. Traffic conditions in general are still unstable and experiencing major delays leading up to busy traffic flows, but can still be controlled well. To optimize this road, Michael et all (2021) formulated four options that can be implemented:

- 1.road widening of the Kemiling-Tanggamus corridor was carried out
- 2. Planning was carried out for 4 ring roads in Gedong Tataan, Pringsewu, Talang Padang and Gisting
- 3. Planning for the construction of a new route from Bandar Lampung-Pringsewu was carried out
- 4. Planning for the construction of a new route from Bandar Lampung-Tanggamus was carried out

Then, there were also issues related to dangerous patching on the Lampung-Palembang Toll Road. The condition of the road, which is known as patchy, is considered dangerous for motorists and improvements should be made immediately. When traveling during the day in conditions where it is not raining and the speed is around 70-80 km/hour, drivers consider the condition of the toll road to be dangerous. It is estimated that if it is night and rainy this will be much more dangerous. Moreover, there are several points at the border of the bridge where vehicles bounce due to the quite different heights of the road and bridge. Previously, massive repairs had been carried out on the Terbanggi Besar-Pematang Panggang-Kayu Agung and Kayu Agung-Palembang sections. Major improvements are needed considering that it is also related to the evaluation of minimum service standards on toll roads which are not met. There are three major problems that occur in the road structure of the two toll roads, namely: roads with holes 2. Roads experiencing cracks 3. Roads experiencing a decrease in the road surface (Syahbana, 2022).

#### c. Railway Road

#### 1. Construction of the Coal Railway Shockcut Line

In 2019, the Lampung Provincial government discussed the Bandar Lampung-Bakauheni railway shortcut route, also known as the Sabah Balau-Paluhan Panjang coal train. Apart from that, in 2018 there were also issues related to the construction of the Special Coal Railway Route in South Lampung. The infrastructure and construction of this shortcut route is being carried out to increase coal transportation to 45 million tons per year by 2023. With this special route, long-range coal transportation (babaranjang) will not cross the city center so as to avoid social impacts on people using transportation. land, whether in the form of congestion at level crossings to the risk of accidents.

In 2019, the Lampung Provincial government urged the central government to speed up the construction of the Tegineneng-Km 3 Tarahan shortcut railway line. This is due to the problem of traffic jams in Bandar Lampung which continues to increase. There are 13 crossing points along the inner city train route to Tarahan, causing quite a large traffic jam. Apart from that, the reason the Lampung Government is speeding up the construction of the shortcut is that if this development is realized it will have an impact on other developments such as the construction of airport trains and skybridges between the train station and Radin Inten II International Airport.

## 2. Airport Train

The airport train station is a train station that is integrated with the airport so that it can make it easier for people to change modes of transportation from land transportation to air transportation. In this case, the link specifically discusses connectivity with Radin Inten II Airport, which is an international airport located in South Lampung Regency with a runway length of 3,000 meters and has been nominated as the third busiest airport on the island of Sumatra. The Regional People's Representative Council (DPRD) of Lampung province agreed to open the Tanjung Karang Railway (KA)-Radin Inten II Branti Airport, South Lampung to reduce congestion and organize better modes of transportation. With the opening of the Tanjung Karang-Airport Radin Inten II railway line, it will be the right solution to reduce congestion and form cohesion and integration of people coming and going from Lampung Province.

In 2019, information regarding the construction of an airport train from Radin Inten II Airport to Bandar Lampung was again discussed. With the existence of the airport train, the route that initially required around 19 kilometers with a travel time of 1 hour will be shorter, namely only 19 minutes. In 2019, the Ministry of Transportation conveyed and asked the regional government and PT KAI to follow up with a 1 year realization target to complete several places and estimate the completion of 1 route first.

In 2020, the Ministry of Transportation is intensively working to optimize the rail transportation mode as a mass transportation option in Bandar Lampung City, starting from the construction of Airport

Trains and Commuter Trains within the city and between cities. The Ministry of Transportation will build an airport train station and Skybridge to connect the airport train station with Radin Inten II Airport. The construction is targeted to be completed by the end of 2020. Construction requires a budget of around 50 to 100 billion Rupiah. The construction of an airport train in Lampung is urgently needed to reduce road traffic density, especially in Bandar Lampung. With mass train transportation, it can cut the journey from Bandar Lampung to Radin Inten II Airport.

## 3. Urban Railway

Referring to the Bandar Lampung City Transportation Masterplan, the plan is for the commuter line to follow the current conditions of the existing railway and there will be plans to add new stations located around the POLINELA, UNILA, MBK, Urip Sumoharjo, Garuntang, Pidada, Sukamenanti and Tarahan campuses. Meanwhile, the LRT will serve the Airport LRT and LRT to Kota Baru. The main factor in the construction of this new station is driven by analysis of the generation and travel of people and vehicles in the future which is increasingly increasing in the city of Bandar Lampung, so that it requires additional modes of transportation, especially public transportation, to improve the traffic and road transportation network. Intercity trains are planned to be commuterline based which are planned for 2 (two) general urban train routes, namely Tanjung Karang – Polinela and Tanjung Karang Tarahan. Meanwhile, inter-city trains are planned to be based on Light Rail Transit (LRT) with 2 main routes, namely Tanjung Karang - Radin Inten Airport.

#### 4. Inter-Regency/City Railway

Currently, Lampung has quite complete transportation facilities, namely land, sea and air transportation.<sup>7</sup>Specifically for land public transportation, in Bandar Lampung itself there are several modes of transportation such as Damri, BRT (Bus Rapid Transit), Taxis and Angkot. However, due to the lack of facilities and integration between each mode of transportation, the traffic situation becomes increasingly congested and irregular, thereby causing passenger congestion to continue to occur.<sup>8</sup>For example, Tanjung Karang Station is located close to two other public transportation facilities, namely Damri and City Transportation (Angkot). The Damri counter is located on the north side of the station building. The Damri counter makes the station atmosphere even more chaotic because it only occupies the side of the station road. Damri Bus Parking was not built in a suitable place, so the speed of Damri Bus travel really disrupts the smooth flow of passengers going to the station. The existence of the City Transport (Angkot) terminal which is located close to the station actually makes the congestion that occurs on the road to the station even worse.

The problem of gate crossings at railroad crossings occurs a lot on every train track between districts/cities.<sup>9</sup>Based on level crossing data in the Lampung Province region, according to the Lampung Province Transportation Service, there are 126 level crossing doors in Lampung Province, including 64 official level crossing doors (20 officially guarded, 38 officially unguarded, 6 flyovers and underpasses. A total of 62 level crossing doors the wild one.

This is what causes accidents due to the absence of doorstops and no doorstop guards. one of which is located on Jalan Hi Komaruddin or precisely behind the State Polytechnic campus. Apart from that, there is an issue related to the development of the Bakauheni km 3 (tarahan) (100 km) Railway Line which is an anticipation of the JSS development plan so that when it is built it will be a connection between The Sumatra and Java corridors include toll roads, railways, electricity, telecommunications and

<sup>&</sup>lt;sup>7</sup>Dariusman Abdillah. 2016. Development of Marine Tourism on the Lampung Bay Coast. Journal of Indonesian Tourism Destinations Vol. 1 No. 1

<sup>&</sup>lt;sup>8</sup>Aminah, Siti. 2018. "Public Transportation and Urban Community Accessibility." Bandar Lampung Civil Engineering Journal, Vol. 9, no. 1, 25

<sup>&</sup>lt;sup>9</sup>Firdausia Insani Kamila, Daniel Christianto, and Hokbyan at the Adoptive Hospital. 2023. Safety Analysis at Level Crossing No. 46 Jl. Kh. Ahmad Dahlan, East Jakarta. Jmts: Civil Engineering Partner Journal Vol. 6, no. 3, August 2023: Pp 731-744

clean water. This plan is a partial part of the Trans-Sumatra Railway (from Lampung to Aceh). Meanwhile, several plans to develop railway lines in urban areas are to reduce the burden on road traffic and to support the creation of effective and efficient mass transportation modes.<sup>10</sup>

## 5. BRT (Bus Rapid Transit)

The policy for implementing BRT is outlined in Bandar Lampung Mayor Regulation Number 10 of 2011 concerning Regional Spatial Planning for 2011-2030, Article 10 paragraph (4) letter (c) states that to increase the provision of integrated city infrastructure and facilities that are environmentally friendly, development The urban transportation system uses a mass transportation system in the primary center of Tanjung Karang as well as the provision of bus rapid transit (BRT) which has implications for providing facilities for pedestrians. At the start of implementation, the implementation of the BRT policy drew pros and cons from various parties. For those who support BRT, it is considered an alternative in providing mass transportation,<sup>11</sup>Meanwhile, those who do not support the implementation of BRT are considered to be killing city transportation businesses. At the start of implementation, there was a serious conflict between BRT and city transportation (angkot). However, this naturally also happened in various other areas that initially implemented BRT. This matter can slowly be handled and angkots are still allowed to carry out operational activities according to their routes, but with the conditions the angkot route permits will not be extended after the validity period has expired. Instead, BRT will become public transportation operating within the city and public transportation will act as a feeder to BRT Bandar Lampung.

BRT as mass transportation is expected to be able to overcome traffic jams in Bandar Lampung City. In operation, BRT service hours are from 06.00 am to 18.00 pm. In 2014, it was recorded that there were 250 BRT vehicles in Bandar Lampung. The implementation of BRT as mass transportation was carried out to reduce the level of congestion and carbon production due to the use of private transportation. There are several things related to this congestion, including the fact that the flow of motorized vehicle traffic jams include street vendors, parked vehicles, non-motorized vehicles (carts and rickshaws), and pedestrians. In fact, until 2022, street vendors will still be found occupying sidewalks, parking lots and roadside edges to sell.

In implementing Bus Rapid Transit as Public Transportation, there were many obstacles, such as financial problems at PT. Trans Bandar Lampung had to cut routes that were supposed to be active to seven routes, whereas in 2015 there were only three routes that were active in implementation, such as the Rajabasa-panjang, Rajabasa-Suraja, Perum Korpri-Suraja routes. Regarding fares, passengers are only charged 2,000 rupiah. In fact, when there was an increase in rates there was no change. Until September 2022 there will be no increase in these fees. However, if there is an increase in rates, it will be planned so as not to burden the community. This is also due to the fact that there are no officially defined routes, so the government is simply adapting to the needs and capabilities of the community to keep BRT operations running. Regarding the plan to implement BRT as the main urban public transportation in Bandar Lampung City, it has been formulated in the Bandar Lampung City Transportation Masterplan.

#### c. Water Transportation

1. Bakauheni Harbor Development Plan

Transportation Levels in the Lampung Province in Realizing Ordered, Safe and Smooth Transportation

<sup>&</sup>lt;sup>10</sup>Rahayu Sulistyorini. 2012. Opportunities for Intermodal Transportation Development in Lampung Province. National Seminar on the Role of Infrastructure in Regional Development, Master of Civil Engineering, Unila Bandar Lampung,

<sup>&</sup>lt;sup>11</sup>Sunardi Manampiar Sinaga, Muchlis Hamdi, Sadu Wasistiono, Sampara Lukman. 2019. Implementation of Bus Rapid Transit (Brt) Based Mass Public Transport Policy in Realizing a Fair and Sustainable Urban Public Transport System in Dki Jakarta Province. Papatung Journal: Vol. 2 No. 3 of 2019

<sup>&</sup>lt;sup>12</sup>Randy Syaputra, Syukur Sebayar, Dwi Herianto, 2015. The Influence of Side Obstacles on National Road Traffic Performance (Case Study of Jalan Proklamator Raya – Pasar Bandarjaya Plaza). Jrsdd, September 2015 Edition, Vol. 3, no. 3, Pages: 441 -454

The initial stage of construction will be carried out in 2021, the initial stage of construction of ASDP together with Bank Syariah Indonesia, Bang Mandiri, BRI, BNI and BTN will build a Grand Mosque, Creative Hub and MSME Center, as well as revitalizing the Siger Cultural Park with an initial investment value of IDR 45 billion. The construction of Bakauheni Harbor City or BHC will be built on an area of 214 hectares, in the first phase the Siger Tower will be built as a cultural area, Bakauheni Mosque, Theme Park, Intermoda Terminal, Marina Village and Mangrove Forest which is equipped with star hotel facilities, villas, and playground.

2. Internationalization of Panjang Port

One of the basics of international law in ports is the Safety of Life at Sea 1974 which was revised in the 1978 amendment, there are rules regarding provisions for port facilities, namely ships that must be available are as follows:

- 1. Construction facilities include structure, stability, machinery and electrical installations, fire protection, fire detectors and fire extinguishers.
- 2. Facilities for radio communications and navigation safety.
- 3. Assistive devices such as buoys and other navigation safety facilities.
- 4. Implementation of provisions to improve shipping safety and security in accordance with the ISM Code and ISPS Code.

At Long Harbor there is also infrastructure to support a port as an international port including Patrol System (patrol system), area boundary fence, main guard post, inspection system for vehicles and people, guard posts and monitoring posts, restricted area signs/warning signs. , Evacuation routes and muster points, water, electricity and communication installations, ship/pier berthing facilities, ship loading and unloading facilities, shipping lanes, fuel facilities, shipping navigation aids (SBNP). So that the existing infrastructure at Panjang Port is sufficient to meet international port standards in terms of availability and is in accordance with the provisions of the ISPS Code which focuses on operational safety and security of an international port. Apart from that, the high contribution of Panjang Port in superior commodity export activities is shown by the dominance of port use of 79.19 percent with a volume reaching 2,736,815 tons/year. This is what supports the internationalization of long ports.

3. New Port/Pier

It is hoped that the construction of this pier can increase trade cooperation between Lampung Province and Bangka Belitung Province. The development of the Mesuji/Tanah Merah port is included in the national priorities supported by the Ministry of Transportation, currently there is a cooperation agreement (MoU) between Lampung Province and Bangka Belitung Province, an investigation and design survey (SID) was carried out in 2018 (Mesuji Port), and there is a Preliminary Study for the Development of the Lampung-Babael Agricultural and Logistics Port, and there is also a DED Way Session. The agreement from several Ministries and the government is that the regions need to propose to UPP Mesuji as well as the Mesuji Port Development proposal, the access road to the Sepangan port is 45.76 km, the access road to the Mesuji port needs to pay attention to the handling of the access road because there are 2 road authorities, namely the national and the regional government.

d. Air Transport

Commercialization of airports in Lampung Province is currently being carried out at several airports in Lampung Province, including Pekon Serai Airport, which has now changed its name to M. Taufik Kiemas Airport. This airport initially functioned as a special airport that functioned in addition to navigation and natural disaster mitigation purposes. In line with current developments, M. Taufik Kieamas Airport has now developed into a commercial airport, which is expected to be able to encourage

the development of the Liwa-Krui flagship area as a new center of economic growth in the western corridor of Sumatra Island.

M. Taufik Kiemas Airport began operating as a commercial airport in 2013. After stopping operations in 2015, M. Taufik Kiemas Airport began operating again in early 2022. The flight route is via Muhammad Taufiq Kiemas Airport (Krui)-Radin Inten II Airport (Bandar Lampung), using the Susi Air airline with a Cessna 208 Grand Caravan aircraft with a capacity of 12 passengers.

#### 2. Transportation Sector Policy for Lampung Province

The development of an area or region depends on the development of transportation facilities and infrastructure or vice versa,<sup>13</sup>The development of transportation facilities and infrastructure in a region depends on the development of trade activities or activities in the region or from the people in that region.<sup>14</sup>For this reason, transportation or trade activities and regional development mutually influence each other. Transportation has strategic value for a region. The strategic value of transportation here, especially its economic value, provides additional welfare for the community.

In relation to poverty alleviation, the World Bank Urban Transport Strategy Review report, Allport (2000) points to an MRT policy for developing cities, namely that at the center of the MRT policy for developing cities there is a real conflict between carrying out poverty alleviation, which for this reason is very important. affordable service is needed, and attracts car users, for whom good service quality and comfort are of paramount importance.

The trend of the Lampung Human Development Index (HDI) is increasing in 2021. The Central Bureau of Statistics (BPS) of Lampung Province noted that the Lampung Human Development Index (HDI) score reached 69.9 in 2021. This figure increased 0.78% compared to the previous year's achievement. amounting to 69.69.

The HDI in Bandar Lampung City is the highest in Lampung Province, namely 77.58 in 2021. Meanwhile, Mesuji Regency has the lowest HDI score in Lampung Province, namely 64.04 in 2021.

Judging in general from the research results, this almost universal increase in LQ is more due to the economic growth rate of Lampung Province which is above the national economic growth rate. This indicates that the sectors that support Lampung Province's economic growth are still sectors that have sufficient potential to be developed in line with regional and national economic growth. Besides that, apart from these basic sectors, there are a number of sectors that have promising potential that are worth developing in Lampung Province, such as the Industrial Sector, Construction Sector, Wholesale and Retail Trade Sector; Car and motorbike repairs, water supply and waste and waste management sectors, and the transportation sector which has an LQ value > 0.70. These sectors are growing better compared to other sectors in Lampung Province. The location of Lampung Province, which is also a strategic area, means these sectors are developing well nationally.

The transportation sector is one of the sectors that plays a role in comprehensive economic development.<sup>15</sup>The development of the transportation sector will directly reflect the ongoing growth of economic development. The success of development in an area is greatly influenced by the role of transportation as the lifeblood of political, economic, socio-cultural and security defense. Transportation development is very important in supporting and driving development dynamics, because it functions as a

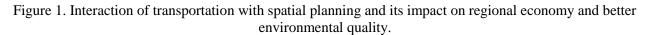
<sup>&</sup>lt;sup>13</sup>Jujun Junaidi, Irwan Gani, Akhmad Noor. 2020. Analysis of Land Transportation on Economic Growth in East Kalimantan Province. PERFORMANCE 17 (2); 264-269

<sup>&</sup>lt;sup>14</sup>Adris A Putra, Susanti Djalante. 2016. Port Infrastructure Development to Support Sustainable Development. Media Engineering Scientific Journal Vol.6 No.1

<sup>&</sup>lt;sup>15</sup>Ahmad Jihad, Hamdan Kadir, Mas'ud Sar. 2023. Performance Analysis of U – Turn Median Openings on Jalan Veteran Utara. Flyover Journal (Jfo)Vol. 03, No. 02 Years

catalyst in supporting economic growth and regional development. Transportation is one of the strategic components in equalizing economic growth, the flow of movement of people and goods, the flow of information (Flow of Information) and financial flows (Flow of Finance) which need to be managed quickly and accurately to meet demands on timeliness.





With the construction of transportation facilities, community economic activities and community empowerment, especially in development in areas that have high economic potential, will be easier to develop.<sup>16</sup>This economic activity will develop if it has good infrastructure and transportation facilities for accessibility. Transportation facilities on land, sea and air play a vital role in socio-economic aspects through distribution functions between one region and another.<sup>17</sup>The distribution of goods and people will become easier and faster if existing transportation facilities function as they should so that transportation can become a means of integrating various regions in Indonesia.

#### a. Land Transportation

Highways The availability of adequate infrastructure is a substantial factor to encourage economic growth.<sup>18</sup>One type of important infrastructure is land transportation, especially road improvements.<sup>19</sup>In a number of studies, road length, number of motorized vehicles and government spending on the land transportation sector have a positive and significant effect on economic growth. The results of this research support the infrastructure led growth paradigm. Furthermore, the estimation results also indicate the importance of government budget support in providing adequate infrastructure. Good infrastructure will ultimately provide positive spillovers to other economic activities.

<sup>&</sup>lt;sup>16</sup>Rembaen, B. Z., Lumolos, J., & Kumayas, N. (2018). Talaud Islands Regency Government Policy in Developing Rural Transportation on Kabaruan Island (Study of the Talaud Islands Regency Transportation Office). Executive Journal, 1(1).

<sup>&</sup>lt;sup>17</sup>Manuela Manueke Gustaaff Buddy Tampi Very Y. Londa. Public Perception of Online Application-Based Transportation Services in Manado City (Case Study at Pt. Go-Jek). PERFORMANCE 17(2), 2020 264-269

<sup>&</sup>lt;sup>18</sup>Febriansyah, F., & Gautama, G. (2022). Analysis of the Effect of Transportation Infrastructure Development on Gross Regional Domestic Product of Way Kanan Regency, Lampung Province. Journal of Strategic Management and Business Applications, 4(2), 508 - 518.

<sup>&</sup>lt;sup>19</sup>Rr. Passed Prapti Nss, Edy Suryawardana, Dian Triyani. 2015. Analysis of the Impact of Road Infrastructure Development on the Growth of People's Economic Enterprises in the City of Semarang. Semarang University Scientific Journal

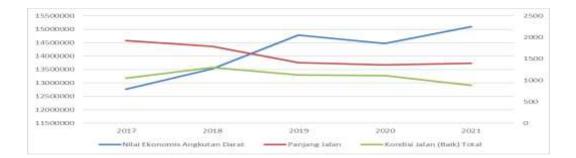
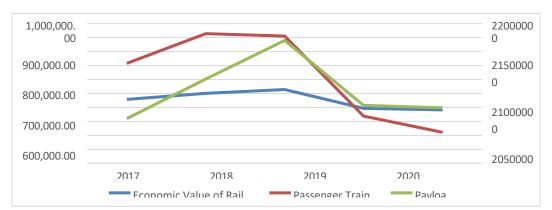
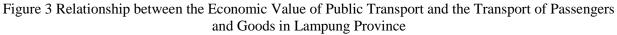


Figure 2. Comparison of the economic value of the transportation sector, length of type and condition of roads in Lampung Province

#### b. Railway

Until now, the rail transportation mode is still the mainstay of society in general, considering that the characteristics of train transportation are that it is more effective and efficient when compared to other land transportation modes.<sup>20</sup>However, trains have not yet become the form of transportation that dominates both passenger and goods travel in Indonesia. In Lampung province itself, rail transportation is generally dominated by goods transportation. Because the current characteristics of trains in Sumatra are freight trains. Meanwhile, the role of trains as passenger transport is still very low. If we look at the role and development of rail transport, in this case, trains in Lampung Province are more influenced by goods transport. The development of the weight of goods transport has a big influence on the economic added value of this transport. This can be seen in the growth rate which has the same pattern as goods transport rather than passenger transport.





This indicates that the development of passenger-based rail transport is still very wide open, moreover that currently the existing rail network is still limited, and the current network is a rail network for Freight Trains. Therefore, the development of the rail network for passenger transportation can be developed sustainably, this is because the need for transportation connecting the eastern, central and

Transportation Levels in the Lampung Province in Realizing Ordered, Safe and Smooth Transportation

<sup>&</sup>lt;sup>20</sup>Atik S. Kuswati, Siti Maimunah, Herawati. 2012. The Role of Railway Infrastructure in the Regional Economy. Garuda Journal Volume 23, Number 2,

western regions is still very limited. The development of TOD areas in each district provides the opportunity for rail transport to expand to all regions in Lampung Province

#### c. Water Transportation

Water transportation consisting of river, lake and ferry transportation as well as sea transportation has a very important role for island countries. Considering the vital importance of transportation for the economy, water transportation in Lampung Province must be developed properly and correctly to support economic growth. The challenges of transportation development are very complex, including water transportation as a result of global economic developments in recent years. Therefore, water transportation development must not only be oriented on a national scale, but must also be oriented on a regional and international scale. If we look at the development of the economic value of water transportation on the economy, the economic value of water transportation has developed quite well every year. The development of water transportation is very resistant to crisis situations, in fact water transportation is one of the mainstay modes that is needed during the Covid 19 pandemic. While other transportation experiences a decline, the economic added value of water transportation continues to experience a positive growth trend. Its role as a distributor of economic goods is very large in Lampung Province, so this transportation needs comprehensive planning so that in the future it can support regional economic activities.

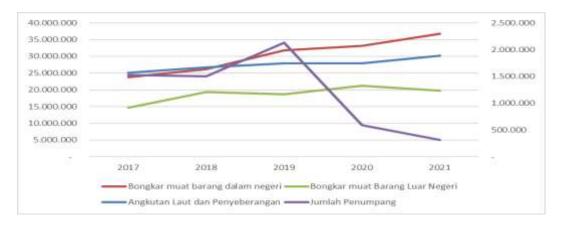


Figure 4. Relationship between loading and unloading activities and passengers on the economic value of water transportation in Lampung Province

## d. Air Transport

In the interaction between the economy and air transportation, the economy will stimulate demand for air travel and cargo (Higgoda & Madurapperuma, 2019). Airport Development and Regional Economic Growth in China (Shujie Yao and Xiuyun Yang, 2008). The role of air transportation in the economy is in activities directly related to the growth of cargo and passengers. During the 2017-2018 period, aviation in Indonesia ran at a positive growth rate, but after 2019 to 2021, air transportation growth experienced a drastic decline. This is because this sector is the sector most affected by the Covid-19 pandemic. In general, the effect can be observed by looking at the number and volume of flights and passenger movements on domestic flights in Lampung Province. With a decrease in users of air transportation services, this will naturally have a negative impact on the aviation business as a whole.

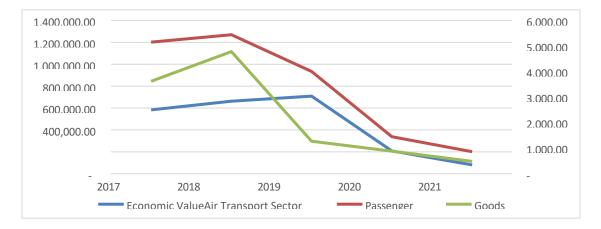


Figure 5. Relationship between the number of passengers and goods on the economic value of air transportation in Lampung Province

## Conclusion

- 1. Issues in the Lampung transportation sector include several crucial aspects that need attention. First, road infrastructure is still a major concern, especially in terms of maintaining and developing a fairly extensive network. Congestion often occurs at a number of points, especially in big cities such as Bandar Lampung, due to the increase in the number of vehicles. Apart from that, public transportation services, such as buses and microbuses, also need to be improved so that they are more efficient and can better meet people's needs. Providing alternative transportation, such as river transportation, needs more attention to reduce the burden on land transportation. In this context, the government needs to work together with various related parties to improve transportation infrastructure and services, as well as implement innovative solutions to overcome these issues.
- 2. The transportation sector policy for Lampung Province focuses on developing infrastructure and better transportation services to increase mobility and support economic growth and community welfare. The Lampung Provincial Government focuses on building and maintaining roads, bridges and public transportation such as buses and microbuses. Apart from that, the development of river and sea transportation is also a focus to reduce congestion on land roads. The government is also promoting sustainable transportation by encouraging the use of environmentally friendly vehicles and integrating smart transportation systems to increase efficiency. This effort aims to improve connectivity between cities and villages, accelerate regional economic growth, and improve the overall quality of life of the community in Lampung Province.

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