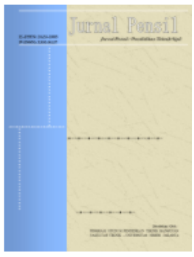
Available *online* at: http://journal.unj.ac.id

Jurnal Pensil | Pendidikan Teknik Sipil

Journal homepage: http://journal.unj.ac.id/unj/index.php/jpensil/index



EVALUATION OF PUBLIC TRANSPORT FACILITIES AT PORTS, AIRPORTS, STATIONS, AND TERMINALS

Raden Herdian Bayu Ash Siddiq[1], Hamzah Hidayatulloh[2], M. Saepul Alam[3], Shafira Nur Fadhillah[4], Gina Yuniar[5], Widde Valensia[6], Amanda Wulansari[7], Rizki Kurniawan[8], Disty Zulchumairoh Nurhasanti[9]*

[1,2,3,4,5,6,7,8,9] Program Studi Teknik Sipil, Fakultas Teknik, Universitas Widyatama
Jalan Cikutra No. 204A, Cibeunying Kidul, Kota Bandung, Jawa Barat, 40125, Indonesia
[*1]raden.herdian@widyatama.ac.id, [2]hamzah.hidayatulloh06@gmail.com, [3]saepul.alam@widyatama.ac.id, [4]shafira.fadhillah@widyatama.ac.id, [5]gyuniar6@gmail.com, [6]vwidde@gmail.com, [7]amandawulansari28@gmail.com, [8]rizkikurniawan61120@gmail.com, [9]distyzulch@gmail.com

P-ISSN: 2301-8437
E-ISSN: 2623-1085

ARTICLE HISTORY
Accepted:
12 Februari 2024
Revision:
13 Mei 2024
Published:
29 Mei 2024

ARTICLE DOI:
10.21009/jpensil.v13i2.43600

Abstract

Indonesia is known as an archipelagic country because it has thousands of islands spread from Sabang to Merauke. To connect an area or island to another, Indonesia has various modes of public transportation. Facilities on public transportation modes must be adequate to accommodate prospective passengers who will travel to an area. Evaluation of public facilities is very necessary to increase passenger comfort. This research was carried out using direct observation methods and using literature reviews from sources on the internet. In this research, there are several modes of public transportation discussed, namely Ketapang Harbor, Gusti Ngurah Rai Airport, Bandung Station, and Guntur Melati Terminal. Ketapang Port has several shortcomings, namely improving the weather information system, improving the traffic operational system, improving services, and expanding the dock. Then, Gusti Ngurah Rai Airport has a shortage of VVIP parking spaces, so improvements are needed. According to the Regulation of the Minister of Communications No. 63 of 2019 on the Minimum Service Standards for Passenger Traffic by Rail, Bandung Station has not met the standards in terms of safety, security, comfort and convenience. Meanwhile, according to the regulation of PM No. 40 of 2015 on the Standards of Service for the Maintenance of Passenger Terminals of Road Transportation, the Guntur Melati Terminal also still has deficiencies in the safety and conveniency aspects.

Keywords: Facilities, Public Transportation, Evaluation

Introduction

Indonesia is known as an island state because it has thousands of islands spread from Sabang to Merauke. Therefore, connecting a region to a region or island to the island of Indonesia has a variety of modes of public transportation, whether it is land, sea, or air transport. According to Kasim & Gunawan (2022), unfair competition in public transport leads to overlapping services and inefficiency. Passengers face difficulties and long transfer times due a lack of integration between modes of transport. Coordinating all modes of transport can improve the efficiency of public transport. According to Basuki et al. (2017) generally, there are several transport modeling categories available for macro and micro planning. According to Reizsky Reynaldy et al. (2022), based on previous research, it also identified factors that influence the choice of modes of public transport.. According to Sibuea (2019), There are three factors that influence the choice of fashion such as, characteristics of travellers, travel characteristics, and characteristics facilities mode of transportation. According to Wahab (2019), There are five main components of transportation: the people who need transportation, the goods that people need, the vehicle as a means of transport, the road as a medium of transport and the organization that manages transportation. According to Khoirunnisa et al. (2022), this is in contrast to the supporting accessibility; the greater the accessibility, the higher the mobility of people and goods from the area of origin to the destination to carry out the activity. These various modes of public transport are each recommended to have stops, takeoffs, and loading stations for prospective passengers before boarding the modes. According to Alkam & Said (2018) and Rahardjo & Yulianti (2023) knowing the characteristics of the user of the mode of transportation can be a first step in conducting good transportation planning. The characteristics that have been acquired can be used as one of the factors in transportation modeling to determine the preference of the user to the available modes of transportation. According to Aminah (2018), the failure of the transportation system interferes with the development of a region/city, affects the efficiency of the urban economy, even other losses. According to Prawata (2014) transportation is very important to eliminate the gap between the place of origin and the destination.

According to Malyasari et al. (2024), the transportation process requires the necessary infrastructure and facilities to regulate the movement of passengers and goods and manage all its components. These public facilities include ports as a place for prospective passengers to board ships and airports as a place for prospective passengers to board planes. Prospective passengers use the terminal to board buses or other forms of public transportation, while they board the train at the station. According to Rahmalia et al. (2020), facilities and infrastructure, as well as supporting facilities for trains and airplanes, are developing rapidly to improve the quality of service to passengers. The public transportation facilities available in Indonesia are able to accommodate prospective passengers departing for inter-city, inter-island, and inter-country areas. According to Della & Rachmanullah (2021), Quality of service is crucial to determining how good an organization or company is in terms of transportation services for human life. Indonesia has a culture of going home or returning home during holidays and national holidays, which means the need for public transportation will increase. In order to be able to accommodate prospective passengers using the public transportation modes that will be used, it is necessary to provide very adequate public transportation facilities. Therefore, this research discusses the study of one of the land, sea, and air public transportation facilities in Indonesia. These include Ketapang Harbor in Banyuwangi, I Gusti Ngurah Rai Airport in Bali, Bandung Station in Bandung City, and Guntur Terminal in Garut.

On public transportation facilities at Ketapang Harbor, Gusti Ngurah Rai International Airport, Bandung Station, and Guntur Melati Terminal, researchers conducted assessments based on observations through a literature review and the author's personal experiences. There are two guidelines that are used as reference material for researchers in writing, namely, the facilities available at Bandung Station are studied based on Ministry of Communications Regulation No. 63 Of 2019 concerning Minimum Service Standar for Transporting People by Train, while the

Terminal Guntur Melati studied based on Ministry of Communications Regulation No. 40 Of 2015 concerning Service Standards for the Implementation of Road Passenger Transport Terminals. This standard is used as reference material for research regarding the evaluation of public facilities at Bandung Station and Guntur Melati Terminal. This evaluation was carried out to increase the satisfaction of public transportation users and attract people's attention to choosing to use public transportation rather than private transportation. According to Sarjana (2021), inconvenience, accessibility, and flexibility continue to be major challenges to using public transport (Zhang et al., 2020), inappropriate routes and tariffs (Herabudin, 2019), inconveniences in transportation due to dirty and unsafe (Hanny & Almassawa, 2021), inefficient public transportation (Tamaki et al., 2019), even the possibility of disease transmission when using public transit (Tirachini & Cats, 2020).

Research Methodology

In this research, direct observations were made in the field and also by conducting literature studies sourced from websites in each location. According to Prawata (2014) literature studies were carried out by observing and collecting standard design data from scientific books as well as searching for data via the internet to find out developments in facility design. Observations were carried out at four locations, namely Ketapang Harbor, I Gusti Ngurah Rai Airpot, Bandung Station, and Guntur Melati Terminasl. The following are the research location points that we took from the website Google Earth.

Figure 1. Ketapang Harbor, Banyuwangi

Figure 2. I Gusti Ngurah Rai Airport, Bali

Figure 3. Bandung Station

Figure 4. Guntur Melati Terminal, Garut

The following are the stages of the research carried out, namely:

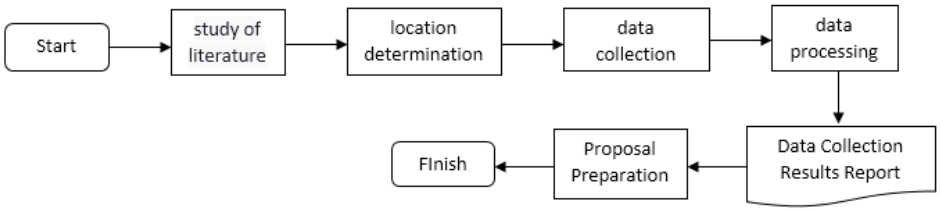


Figure 5. Research Flow

Research Results and Discussion

According to KNKT.22.05.03.03 (2023) PT.ASDP Indonesia Ferry (Persero) Branch of Ketapang is responsible for the management of the port of crossing Ketapang, which is under supervision of the Land Transportation Management Hall of Territory XI East Java Province. In this port, Ro-ro ships operate daily, carrying passengers, cars, and goods. One of the most dense crossing ports is Ketapang Crossing Port. The Ketapang-Gilimanuk route is a route in the Port of Transit of Ketapang that connects Java Island with Nusa Tenggara Island West. According to Tjiptono (2014), service users deemed some polices issued by PT.ASDP Indonesia Ferry (Persero) in Port Ketapang to be less efficient. For example, the latest policy on using online tickets aims to distribute vehicles or people coming in more evenly and in accordance with port capacity. Therefore, we anticipate a reduction in congestion, particulary during the peak season. However, the implementation of this policy still faces a number of challenges, which can affect the user experience. Ketapang port facilities are divided into two, namely landside and seaside facilities.

Table 1. Landslide facilities Ketapang Port

No	Type	Area (m²)/Unit
1	Port Area	27.524
2	Parking Lot Ready to Load	15.455
3	Drop-off/Pick-up Parking Lot	1.570
4	Transit Room	562,08
5	Generator Room	28
6	Terminal and office buildings	2.977
7	Counter	17
8	Passenger Waiting Room	348,75
9	Gangway	141
10	Shelter	259

(Source: PT.ASDP Indonesia Ferry (Persero) Cabang Ketapang, 2022)

Table 2. Seaside facilities Ketapang Port

No	Facility	Area (m²)	Amount
1	Bolder	-	12 Units
2	Trestle	301.05	-
3	Fender	-	24 Units
4	Plengsengan	-	3 Units
5	Catwalk	-	8 Units
6	Breakwater	-	29,9 m
7	Harbor Pool	18938.87	-

(Source: PT.ASDP Indonesia Ferry (Persero) Cabang Ketapang, 2022)

Here's the productivity data for passenger departures and arrivals in Ketapang Harbour over the last five years (2017-2021).

Depatures															
No	Years	Trip	Total Passengers	Vehicle Class											
				I	II	III	IV A	IV B	V A	V B	VI A	VI B	VII	VIII	IX
1	2017	94343	6505148	842	704732	12978	386576	181434	29614	284742	55425	165149	102870	1729	29
2	2018	96658	6420884	971	702227	11799	412604	191641	29642	293178	53357	168625	118479	2105	64
3	2019	94485	7075422	1784	660600	12099	452372	199583	37539	308207	58124	168659	130658	2515	52
4	2020	85057	3897538	524	335059	8530	245919	165435	17570	271243	23146	118920	97477	2701	62
5	2021	95867	56476	562	362977	10863	456976	239490	29593	345578	30216	42776	24015	50	1
Total		466410	23955468	4683	2765595	56269	1954447	977583	143958	1502948	220268	664129	473499	9100	208

Figure 6. Productivity data of cross-departure of Ketapang Port over the last 5 years

Arrivals															
No	Years	Trip	Total Passengers	Vehicle Class											
				I	II	III	IV A	IV B	V A	V B	VI A	VI B	VII	VIII	IX
1	2017	93666	6761398	591	705314	12839	399798	178809	29306	284792	55098	166091	108592	1805	145
2	2018	87574	6352790	622	663155	10980	365842	169389	27219	267238	49622	157182	109094	2442	46
3	2019	94106	6466673	584	735290	10455	444108	194644	34294	310306	56536	167544	130477	1932	38
4	2020	81900	3692807	991	353940	7473	250666	165701	16906	277191	23101	120609	96444	2397	21
5	2021	12695	8050	111	38589	1232	66749	24221	3925	48234	4347	15893	16042	881	5
Total		369941	23281718	2899	2496288	42979	1527163	732764	111650	1187761	188704	627319	460649	9457	255

Figure 7. Productivity data of cross-departure of Ketapang Port over the last 5 years

According to Hardiyanti et al (2019), service level is a way to measure the operational conditions of traffic flows. Therefore, when building a flood, the level of service on the flood is crucial to delivering passenger safety satisfaction. There are several issues and problems that occur at the port, such as frequent traffic jams in the movable bridge and pontoon area for tens of kilometers due to bad weather, disruption of departure and arrival operations due to limited dock facilities, and the perception that the quality of service at the port has not yet reached the optimal level in our opinion. passenger. According to Gusleni (2018), currently, the rapid transit bus (RTB) is means of public transportation in the port. However, from the point of view of connecticity, convenience, safety, security, and comfort, the availability of sea passenger terminals and road passenger stops is not optimal.

In resolving existing issues, there are some steps that need to be considered. Congestion due to bad weather can be solved by improving the information system for passengers regarding weather conditions and sea wave conditions so that passengers are able to arrange their departure schedules well, using more sophisticated and accurate weather forecasting technology to provide short- and long-term weather prediction information. The increase in passengers during holidays can be anticipated by increasing ship capacity and providing temporary shelter facilities. If there is a disruption to crossing operations, pier expansion and construction can be carried out, as can rejuvenation of pier infrastructure, improvement of the management system to regulate traffic flow, and arrangement of departure schedules to make them more regular and planned so as to avoid spikes in vehicle and passenger volumes. Problems regarding service quality that are not yet optimal can be addressed by improving facilities and infrastructure, such as by expanding comfortable waiting rooms, increasing clear and easy information and communication for passengers, conducting training for port officers, and utilizing technology such as online ticket booking or recognition technology. face so that the ticket checking process is much faster, as well as conducting regular customer satisfaction surveys for service evaluation.

According to Fandy Tjiptono (2014) customers feel satisfied or not after using the product or service in question in accordance with their initial expectations before purchasing the product. Paying attention to service is a step taken by PT. ASDP Indonesia Ferry (Persero) in Port Ketapang to increase customer satisfaction, which is part of the effort to the company's vision and mission. In this case, the quality of service of PT. Improvements are being carried out gradually, with special focus on obstacles such as boat constraints and port facilities, as well as improved ticket purchasing services. According to Intari et al (2019), the function of the ticket purchasing counter must be to provide services in the form of a smooth flow of ticket purchases and meaningful passenger service, so the problems that cause inconvenience need to be investigated further.

According to Mustaman et al (2020), air transportation has advantages such as high speed compared to other transportation and the need to provide very large construction. This research used one of the airports in Indonesia, namely, I Gusti Ngurah Rai International Airport, which is located in Tuban, Kuta District, Badung Regency, Bali. As the second busiest airport after Soekarno Hatta International Airport, it serves flights for small aircraft up to Boeing, both on domestic and international routes. According to Annual Report Angkasa Pura I, 2017 I Gusti Ngurah Rai Airport in Bali, which is managed by PT. Angkasa Pura, experienced economic growth in the transportation sector, making it one of the airports with the highest number of passengers throughout 2017. This is due to the island of Bali being famous as a tourism destination thanks to its natural beauty and culture. The number of passengers arriving and departing from this airport reached 21.05 million, an increase of 5.3% compared to the previous year, which recorded 20.01 million passengers. In 2017, according to Kurniasih et al (2019) aircraft movements also increased by 5.3%, reaching 146 thousand aircraft, compared to 139 thousand aircraft in the previous year. Ngurah Rai International Airport needs to adapt its facilities as the number of passengers using air travel rises. According to Amadhea & Ahyudanari (2023), the expansion of airport infrastructure, particularly runways, to improve aircraft and airport passenger traffic today is in line with the United Nation's goals of sustainable development, namely industry, innovation, and infrastructure.

Airport facilities are divided into two, namely the land side and the air side. According to Michelle & Purnama (2023) PT.Angkasa Pura I (Persero), the branch of I Gusti Ngurah Rai International Airport, is an airline service provider with two main business areas: aeronautical services and no-aeronautic services. Aeronautic services include aircraft parking, northern and southern aircraft, and passenger processing, while non-aeronautical services include food and beverages, retail, advertising, property, parking vehicles, and cargo service. Ngurah Rai Airport has variety of facilities, including runways, taxiways, aprons, and various other air and lanside facilities, such as international and domestic passenger terminals, VIP lounges, cargo areas, as well as SAR facilities and aircraft fuel storage. The following are details of airport facilities:

Table 3. Airside facility

Airside Facility	
Aerodome Refference Code	: 4E
Runway Operation Category	: Cat I
Dimension of Runway	: (3.000 x 45) m
Runway Strip	: (3.120 x 300) m
Taxiway	
Perpendicular	: 5
Dimension	: 3 x (148,5 x 23) m (600 x 23) m (600 x 23) m
Rapid Exit	: 2
Dimension	: 2 x (237,62 x 23) m
Apron	
F1	: 9 (F1 = B-747, A-300, A-330, A-340, B-777)
F2	: 4 (F2 = DC-10, A-310, A-320, A-319, MD-11, B-767)
F3	: 25 (F3 = B-737, DC-9, Fokker-100, MD-82, MD-90)
F4	: – (F4 = Fokker-50, Fokker-28, Fokker 27, Cassa-212, ATR-42, ATR-72)
Area of Apron	: 269.367 m²
Apron Cargo	: Combined with Passenger Plane
Fire Fighting Category	: Cat – IX
Helipad	: 675 m²
Area of GSE	: 24.490 m²
Biggest Plane	: Airbus tipe A380-800 owned by Emirates Airlines

Table 4. Landslide facility

Landside Facility	
Internasional Passenger Terminal	: 65.898,5 m²
Domestic Passenger Terminal	: 14.791,86 m²
Vehicle Parking	: 51.348 m²
VIP I	: 633 m²
VIP II	: 400 m²
Cargo International Area	: 3.708 m²
Cargo Domestik Area	: 2.574 m²
Inflight Catering	: 5.720 m² (PT. Angkasa Citra Sarana / ACS)
Inflight Catering II	: 3.040 m² (PT. Jasapura Angkasa Boga)
Aircraft Refueling Capacity	: (PT. Pertamina (Persero)
3 Storage Tanks	: 6.481.000 liter
3 Storage Tanks	: 13.528.000 liter
Search & Rescue Facilities (SAR)	: Available
Trolley	: Available

Flight activities that continue every day have created several issues that occur at I Gusti Ngurah Rai International Airport. First, the runway capacity is small, so it is necessary to add an existing runway at the airport. According to Sumarjaya (2019) I Gusti Ngurah Rai International Airport only has one runway. According to Rachmad et al (2020), one of the important parts that must be found at the airport is the runway. At certain times, this airport experiences a buildup of queues (holding) to use the runway every day. Second, there is still little infrastructure in car parking facilities, so it is necessary to develop parking facilities for both VVIP and regular parking. According to Putri et al (2017) parking at the airport is currently a serious problem. The high number of parking users at the airport, both for two-wheeled and four-wheeled vehicles, means that the amount of land available to be used as a parking area cannot accommodate all the vehicles that will use the parking area. Lastly, comfort for passengers using buses at the airport. Anticipation is to evaluate the orderliness of the bus driver.

Bandung Station is the largest station in the city of Bandung. This station is on Jalan Kebonjeruk, Andir, Bandung City, West Java. Bandung Station is a large type A train station that is at an altitude of +709 meters and has 2 entrances, namely the south gate, which serves local train departures, and the north gate, which serves intercity train departures. According to Indahsari & Wulandari (2016), the railway station's infrastructure facilities cover many things, including standard service facilities such as information boards, ticket stores, and worship rooms. The waiting room is one the most important facilities that affects the station's comfort. A variety of factors, such as the state of the available facilities, the working environment (such as fair temperature, noise level, and lighting level), the ease of information access, and the quality of services provided by the rail management, influence the quality of service at railway stations. According to Primayandi & Gunawan (2022), the train is one of the modes of public transport that can transport many passengers quickly, safely, economically, and efficiently.

According to Sabilla & Herman (2022), this is the minimum service standard that a service provider must meet for its users, according to Ministerial Regulation No.63 of 2019. This standard becomes the reference for service quality, which is an obligation of service providers to users. It's primary purpose is to improve services that are easy, fast, quality, affordable, and measurable. According to Harahap & Harahap (2022), in general, rail users expect good service, with a priority on comfort, safery, and passenger satisfaction. The SPM at the station covers several aspects, namely safety, security, reliability, comfort, convenience, and equality.

Evaluation and issues of problems that still occur at Bandung Station based on the aspects assessed. In terms of safety aspects, there is a lack of fire extinguishers, and there are no smoke detectors or sprinklers available. However, complete health facilities are available, the lighting is functioning well, the platform distance meets the requirements, there is a canopy on the platform, and there is an assembly point in an open space. The security aspect is the lack of emergency telephone numbers to anticipate the occurrence of an emergency. However, there are many CCTV that function well, and there are many officers who help passengers. Related to reliability and regularity, manual ticket counters and vending machines are available, which are equipped with instructions for their use; train schedules and departure routes are available; and loudspeakers are available, as well as information on train seat availability. According to Shidqi Alia Taufiq (2016) Bandung Train Station has information facilities (especially a signage system) in the form of an LCD screen that displays the train schedule that will depart and instructions on the location of the room. In terms of comfort, the availability of men's and women's toilets is still lacking, so they need to be added according to existing standards. However, there is a waiting area, a well-maintained boarding area equipped with seating, a clean prayer room, good air circulation, station cleanliness is always maintained, and smoking is prohibited in certain areas. In terms of convenience, there is no station plan or layout that is easy to read and has strategic placement. However, there are signs for onward transportation, ample parking, special areas for pedestrians and those with special needs, and clear directions. In the equality aspect, there are seats and lifts

for passengers with special or priority needs; a machine counter for passengers with special needs; and a breastfeeding room that is equipped with facilities that comply with standards.

According to Susanti et al. (2018), One way to pique public interest in using the train service is to provide facilities at the station. Then we need rebuild the facilities at the railway station to increase the public's interest in travel. According to Farida et al. (2022), transportation mode infrastructure in the form of terminals is the center for vehicle arrivals, departures, boarding, dropping off passengers, and transfers between modes. Guntur Terminal, located on Jalan Guntur Sari, Haurpanggung Village, Tarogong Kidul District, Garut, West Java, is the main terminal. Its function is not only as a place for inter-city passenger services but also as a transportation provider center for city transportation and MPU transportation. Guntur Melati Terminal is a Type A terminal that stands on an area of 20,119 m^2. It was established in 1984 with the aim of making it easier for the public to use public transportation to travel to or leave Garut Regency.

According to Farghani & Judiantono (2023), passenger terminals serve as transportation infrastructure for passenger puckup and drop-off, public vehicle arrivals and departures, and fashion transfers, both intramodal and intermodal. According to Subagyo et al (2024), passenger terminals must have primary facilities, support facilities, and public facilities. In order to meet the requirements of facilities in the passenger terminal, it is necessary to observe the minimum service standards set out in the Ministry of Communications Regulation No.40 of 2015 on standards of service maintenance of road passenger transport terminals. The analysis of public facilities at Guntur Melati Terminal is assessed based on Regulation Number PM 40 of 2015 regarding Service Standards for Organizing Passenger Terminals and Road Transport, which must be fulfilled by the service provider. According to Fatchuriza et al. (2024), service standards for the operation of road passenger transport terminals are guidelines used for the smooth operation of the terminal. These standards must be adhered to and provided by the terminal manager, covering aspects of safety, security, reliability, comfort, convenience, and equality. Evaluation and issues of problems that still occur at the Guntur Melati Terminal based on the aspects assessed. In terms of safety aspect: there are No. evacuation signs, so the evacuation route is not adequate. In terms of convenience, public transportation parking areas are still not large enough.

Conclusion

Based on the results of the observations made, it can be concluded that the evaluation of public transportation facilities is, Ketapang Port, Banyuwangi the issue of efficiency is the main concern for Ketapang Port facilities, including that the port needs to improving the information system related to weather information so that it can predict temporary cessation of shipping activities as well as traffic jams due to missing information related to delays in shipping activities can be avoided, improving the operational system for vehicle and passenger traffic flow, improved service systems so that passengers get comfort and a memorable experience while using port facilities, Ketapang Port needs to provide temporary accommodation facilities for passengers stuck in traffic jams due to delays in shipping activities, and it's necessary to expand and increase the number of piers to increase the capacity to carry goods and passengers. This is because the main problem that occurs at Ketapang Port is that there are many passengers using ship services, but the dock loading conditions are limited. I Gusti Ngurah Rai Airport, Bali Airport equipped with adequate public facilities, there are several issues that we have encountered, namely the issue of the crisis capacity of the runway so that it is named the 2nd busiest airport in Indonesia. It needs to add a runway at I Gusti Ngurah Rai Airport, and then the infrastructure in the parking area is still lacking. So there needs to be improvements regarding existing infrastructure, and on service issues, there needs to be an evaluation of minibus drivers who like to push airport visitors. Bandung Station, based on Minister of Transportation Regulation No. 63 of 2019 (Minimum Service Standards for Transporting People by Train), the complete facilities at Bandung Station are not yet 100% looked at in the aspects of safety, security, comfort, and convenience; each item of the facility aspect still has shortcomings and needs to be improved. However, a very good

operational system, very well-maintained security, and excellent facility maintenance mean that Bandung Station can be used as an example for other stations as a large station that is in accordance with PM No. 63 of 2019. Guntur Melati Terminal, Garut, based on Minister of Transportation Regulation No. 40 of 2015 (Service Standards for the Implementation of Public Transport Passenger Terminals), the complete facilities at the Guntur Melati terminal are still incomplete, such as the safety and convenience aspects and each item of the facility aspect. However, the operational system is very good, security is very well maintained, and the maintenance of facilities is very good, so the Guntur Melati terminal should be used as an example of other terminals as a type A terminal, which is in accordance with PM No. 40 of 2015.

References

Alkam, R. B., & Said, L. B. (2018). Pemilihan Moda Transportasi Menuju Kampus Mahasiswa Universitas Muslim Indonesia. *Jurnal Transportasi*, *18*(3), 201–210. https://doi.org/10.26593/jtrans.v18i3.3158.201-210

Amadhea, G., & Ahyudanari, E. (2023). Perancangan Perpanjangan Runway Bandara I Gusti Ngurah Rai. *Jurnal Teknik ITS*, *12*(3), 150–156. https://doi.org/10.12962/j23373539.v12i3.126808

Aminah, S. (2018). Transportasi Publik dan Aksesibilitas Masyarakat Perkotaan. *Journal Unair*, *9*.

Basuki, K. H., Kushardjoko, W., Janita, A., & Pratama, G. S. (2017). Analisis Kelayakan Perubahan fungsi Terminal Penumpang menjadi Fasilitas Parkir Angkutan Barang (Studi Kasus Terminal Terboyo Semarang). *Media Komunikasi Teknik Sipil*, *23*(1), 14–22. https://doi.org/10.14710/mkts.v23i1.12536

Della, R. H., & Rachmannullah, A. F. (2021). Perspektif Kepuasan Penumpang dalam Kualitas Pelayanan Kapal Feri: Studi Kasus Pelabuhan Penyebrangan Merak-Bakauheni. *Cantilever: Jurnal Penelitian Dan Kajian Bidang Teknik Sipil*, *4247*(April), 1–9. https://doi.org/10.35139/cantilever.v10i1.80

Farghani, A. N., & Judiantono, T. (2023). Evaluasi Efektivitas Terminal Penumpang Cileunyi. *JRPWK: Jurnal Riset Perencanaan Wilayah Dan Kota*, *3*(1), 83–90. https://doi.org/10.29313/jrpwk.v3i1.2056

Farida, I., Teguh, R., Sidik, P., Zhafirah, A., Bensin, P., Kendaraan, S., Cadangan, R. P., Orang, S., Administrasi, R., Retribusi, P., & Informasi, R. (2022). Evaluasi Penataan Terminal Angkutan Darat Pameungpeuk Kabupaten Garut. *Akselerasi : Jurnal Ilmiah Teknik Sipil*, *3*(2), 31–43. https://doi.org/10.37058/aks.v3i2.4584

Fatchuriza, M., Putra, R. A., & Zein, A. L. (2024). Implementasi Peraturan Menteri Perhubungan Nomor 40 Tahun 2015 Tentang Standar Pelayanan Penyelenggaraan Mangkang Kota Semarang. *JUSTICE - Journal of Social and Political Science*, *3*(1), 33–49. https://doi.org/10.1029/justice.v3i1.71

Gusleni, Y. (2018). Integrasi pelayanan angkutan umum di Pelabuhan Tanjung Emas. *Jurnal Transportasi Antarmoda*, *16*(5), 51–64. https://doi.org/10.25104/mtm.v15i1.413

Hanny, R., & Almassawa, S. F. (2021). Community Perception of the Usage of Urban Public Transport and Online Application Based Transportation in South Tangerang. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, *23*(1). https://doi.org/10.32424/1.jame.2021.23.1.4108

Harahap, A. P. P., & Harahap, R. H. (2022). Implementasi Peraturan Menteri Perhubungan Nomor PM 63 Tahun 2019 Tentang Standar Pelayanan Minimum Angkutan Orang Dengan Kereta Api Dalam Kemudahan Dan Kenyamanan Layanan Di Stasiun Kereta Api Medan

Implementation of the Regulation of the Minister of Tra. *Journal of Education, Humaniora, and Social Science (JEHSS)*, *5*(1), 618–625. https://doi.org/10.34007/jehss.v5i1.1259

Hardiyanti, S. A., Wari, W. N., Melati, D., Sandi, N., & Tyas, A. A. (2019). Analisis Tingkat Pelayanan Terhadap Kepuasan Penumpang pada Pelabuhan Ketapang Banyuwangi. *Jurnal Matematika Dan Pendidikan Matematika*, *4*(2), 103–112. https://doi.org/https://doi.org/10.26594/jmpm.v4i2.1621

Herabudin, H. (2019). Role of Transportation Department Governance Urban Public Transporat in Solok City. *Jurnal Kelola: Jurnal Ilmu Sosial*, *2*(2). https://doi.org/10.15575/jk.v2i2.5439

Indahsari, S. N., & Wulandari, R. (2016). Analisis Ergonomi Lingkungan Ruang Tunggu Selatan Stasiun Bandung Berdasarkan Standar Kenyaman Pengguna. *Idealog*, *1*(3), 232–246. https://doi.org/10.25124/idealog.v1i3.947

Intari, D. E., Budi, H., Kuncoro, B., & Saputri, A. E. (2019). Evaluasi Kinerja Antrian Pada Loket Penumpang Pelabuhan Merak Banten. *Fondasi: Jurnal Tekik Sipil*, *8*(2), 176–185. https://doi.org/10.36055/jft.v8i2.6665

Kasim, M. R., & Gunawan, A. B. (2022). Evaluasi Skala Pelayanan dan Rencana Penambahan Halte untuk Pengembangan Transportasi Multimoda di Kota Makassar. *Jurnal Teoretis Dan Terapan Bidang Rekayasa Sipil*, *29*(1). https://doi.org/10.5614/jts.2022.29.1.10

Khoirunnisa, I., Putri, M. N., Cahya, D. L., & Sari, D. A. K. (2022). Intensity of Transportation Movement in DKI Jakarta PSBB and PPKM Policities During the Covid-19 Pandemic. *Jurnal Pensil: Pendidikan Teknik Sipil*, *11*(3), 242–257. https://doi.org/10.21009/jpensil.v11i3.28369

KNKT.22.05.03.03. (2023). *Gerbang Samudera 2 Bhakti II*.

Lestari, E., & Suwena, K. R. (2021). Analisis SWOT PT.ASDP Indonesia Ferry (Persero) Pelabuhan Ketapang-Gilimanuk. *Ekuitas: Jurnal Pendidikan Ekonomi*, *9*(2), 353. https://doi.org/10.23887/ekuitas.v9i2.30860

Malyasari, N., Hendarto, S., & Kusdian, D. (2024). Evaluasi Kinerja Terminal Tipe A Indihiang Kota Tasikmalaya. *Komposit: Jurnal Ilmu-Ilmu Teknik Sipil*, *8*(1), 189–196. https://doi.org/10.32832/komposit.v8i1.15086

Michelle, & Purnama, Y. (2023). Analisis Kinerja dan Fasilitas Aksesibilitas Unit Pelayanan Khusus Bagi Penyandang Disabilitas Di Bandar Udara Internasional i Gusti Ngurah Rai Bali. *SRJ: Student Research Journal*, *1*(4), 276–289. https://doi.org/10.55606/srjyappi.v1i4.533

Mustaman, S., Fahira F, & Nirmalawati. (2020). ANALYSIS OF FACTORS THAT AFFECT TO INFRASTRUCTURE IMPROVEMENT OF SYUKURAN AMINUDDIN AMIR AIRPORT IN BANGGAI DISTRICT. *PADURAKSA: Jurnal Teknik Sipil Universitas Warmadewa*, *9*(2), 161–171. https://doi.org/10.22225/pd.9.2.1856.161-171

Prawata, A. (2014). Fasilitas Transit Transportasi Umum sebagai Media untuk Menciptakan Mobilitas dan Bagian Kota Jakarta yang Sehat. *ComTech: Computer, Mathematics and Engineering Applications*, *5*(2), 879. https://doi.org/10.21512/comtech.v5i2.2293

Primayandi, A. M., & Gunawan, A. I. (2022). Analisis Persepsi Penumpang Kereta Api Jarak Jauh Terhadap Keamanan dan Kualitas Layanan di Stasiun Bandung. *Prosiding Industrial Research Workshop and National Seminar*, *13*(1). https://doi.org/10.35313/irwns.v13i01.4367

PT.ASDP Indonesia Ferry (Persero) Cabang Ketapang. (2022).

Putri, D. A. A. G., Suthanaya, P. A., & Ariawan, I. M. A. (2017). Analisis Karakteristik dan Kebutuhan Parkir di Bandara Internasional I Gusti Ngurah Rai-Bali. *Jurnal Spektran*, *5*(2), 156. https://doi.org/10.24843/SPEKTRAN.2017.v05.i02

Rachman, M. A., Rahman, H., Subagio, B. S., & Hendarto, S. (2020). Study of Flexible Pavement Structure Maintenance in Runways with Pavement Condition Index (PCI) Method. *Jurnal Teknik Sipil*, *27*(1), 25. https://doi.org/10.5614/jts.2020.27.1.4

Rahardjo, B., & Yulianti, M. (2023). Pemodelan Pemilihan Moda Transportasi (Studi Kasus : Fakultas Ekonomi dan Bisnis Universitas Negeri Malang). *Media Komunikasi Teknik Sipil*, *29*(1), 151–162. https://doi.org/10.14710/mkts.v29i1.54387

Rahmalia, A., Riyanto, B., & Darsono, S. (2020). Analisis Pemilihan Moda Transportasi Rute Semarang – Jakarta. *Jurnal Aplikasi Teknik Sipil*, *18*, 181–190. https://doi.org/10.12962/j2579-891X.v18i2.7392

Reizsky Reynaldy, Martina Kasikoen, K., Listya Cahya, D., & Novetrishka Putri, M. (2022). The Relationship Between the Characteristics of the Choice of Transportation Modes in the City of West Jakarta During the Covid-19 Pandemic. *Jurnal PenSil*, *11*(2), 186–206. https://doi.org/10.21009/jpensil.v11i2.26578

Sabilla, R. A., & Herman. (2022). Kepuasan Penumpang terhadap Kualitas Pelayanan Jasa Kereta Api di Stasiun Bandung selama Pandemi Covid-19 dengan Metode IPA dan. *Journal of Sustainable Construction*, *2*(1), 1–12. https://doi.org/10.26593/josc.v2i1.6035

Sarjana, S. (2021). Perspektif Urban Public Transportation dalam Kajian Meta-Analysis. *Media Komunikasi Teknik Sipil*, *27*(2), 277–287. https://doi.org/mkts.v27i2.40635

Sibuea, D. T. A. (2019). Studi Karakteristik Pengguna Angkutan Umum Dalam Pemilihan Moda Transportasi. *Jurnal Pendidikan Teknik Pembangunan Dan Sipil*, *5*(2), 64–72. https://doi.org/10.24114/ebjptbs.v5i2%20DES.16144

Slamet, F. F., & Fadjarwati, N. (2020). Evaluasi Kinerja Aset Fasilitas Wisata Domba di Kabupaten Garut. *Jurnal Manajemen Aset Infrastruktur & Fasilitas*, *4*(3), 27–38. https://doi.org/10.12962/j26151847.v4i3.7099

Sumarjaya, I. W., Ayu, I. G., & Srinadi, M. (2019). Analisis Kapasitas Runaway Bandara I Gusti Rai Menggunakan Teori Antrean. *E-Journal Matematika*, *8*(3), 230–235. https://doi.org/10.24843/MTK.2019.v08.i03.p258

Susanti, A., Asih, R., Soemitro, A., & Suprayitno, H. (2018). Identifikasi Kebutuhan Fasilitas Bagi Penumpang di Stasiun Kereta Api Berdasarkan Analisis Pergerakan Penumpang Identification of Station Facilities Needed by Train Passenger Based. *JMAIF: Jurnal Manajemen Aset Dan Infrastruktur Dan Fasilitas*, *2*(1), 23–34. https://doi.org/10.12962/j26151847.v2i1.3765

Tamaki, T., Nakamura, H., Fujji, H., & Managi, S. (2019). Efficiency And Emissions From Urban Transport: Application To World City-Level Public Transportation. *Science*, *62*, 55–63. https://doi.org/10.1016/j.eap.2016.09.001

Tirachini, A., & Cats, O. (2020). COVID-19 and Public Transportation : Current Assessment, Prospects, and Research Needs. *Journal of Public Transportation*, *22*(1), 1–21. https://doi.org/10.5038%2F2375-0901.22.1.1

Wahab, W. (2019). Studi Analisis Pemilihan Moda Transportasi Umum Darat di Kota Padang antara Kereta Api dan Bus Damri Bandara Internasional Minangkabau. *Jurnal Teknik Sipil ITP*, *6*(1), 30–37. https://doi.org/10.21063/JTS.2019.V601.05

Wiguna, I. W. Y. M., Subagyo, E. R., & Surya, A. . B. O. K. (2024). Evaluasi Penataan Fasilitas Terminal Tipe C untuk Meningkatkan Efisiensi Operasional (Studi Kasus Terminal Tipe C Semanggi). *Jurnal Keselamatan Transportasi Jalan (Indonesian Journal of Road Safety)*, *10*(2), 133–144. https://doi.org/10.46447/ktj.v10i2.560

Zhang, Z., Tafreshian, A., & Masoud, N. (2020). Modular transit: Using autonomy and modularity to improve performance in public transportation. *Transportation Research Part E: Logistics and Transportation Review*, *141*, 102033. https://doi.org/10.1016/j.tre.2020.102033