

CITY FEATURES



Pekanbaru City is the capital and the largest city in the province of Riau, Indonesia. This city is one of the largest economic centers on the island of Sumatra and is a city with a high rate of growth, migration, and urbanization. The city, which has an area of 632.26 km², has a population of 994,585 people (2021). The average population growth rate from the year 2010–2020 is 0.89% per year (BPS Pekanbaru city, 2021). Pekanbaru’s economic development is strongly influenced by the presence of oil companies, pulp, and paper mills, as well as, oil palm plantations and their processing plants. Pekanbaru has the Bandar Raya Payung Selaki Terminal at the center of the inter-city and inter-provincial transportation service system.



Population
994,585
 (2022)



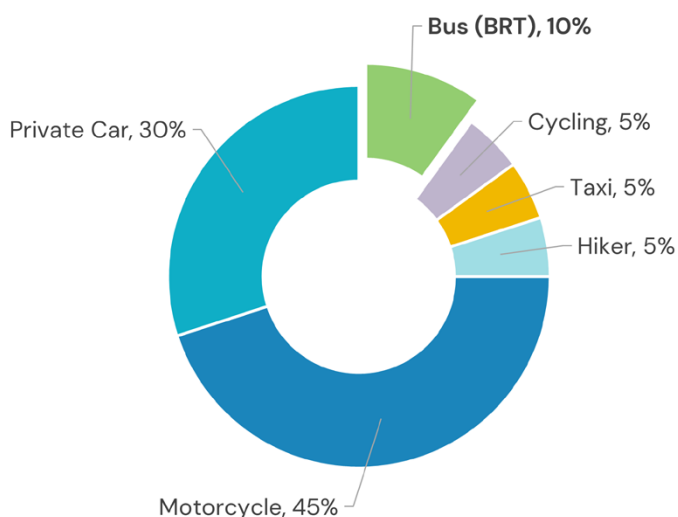
Land area
632.26 km²



Average temperature
21 °C (winter)
35.6 °C (summer)

TRANSPORT FEATURES

Modal Split¹

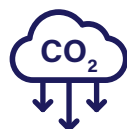


Air Pollutant Levels²



PM 2.5	NO ₂
19.4	—
PM 10	SO ₂
0.1	—

GHG Emission Levels



Total GHG emissions	—
From road transport	—

To support daily mobility, Pekanbaru residents prefer to use private vehicles. 20% of the population uses public transportation buses, 30% uses private cars, 45% uses private motorbikes, and 5% uses bicycles and prefers to walk. In 2009, there was a BRT service that Trans Metro Pekanbaru managed. However, the bus operation was limited because the demand was very low. Therefore, due to the high number of private vehicles and motorbikes, it is not surprising that the city of Pekanbaru is experiencing congestion and air pollution.

¹ Transportation Agency of Pekanbaru, 2021

² Environment agency of Pekanbaru city, 2021

BUS SYSTEMS OUTLOOK³

Bus Trips Features



Number of bus trips
16,509 (2019)
5,954 (2022)



Passengers by gender

Men **53%**
 Women **46%**



Average time
44 min



Trips by purpose

Return home **39%**
 Work **36%**
 Study **8%**
 Recreation **8%**
 Errands **6%**
 Shopping **2%**
 Others **1%**

In 2021, Trans Metro Pekanbaru Bus users account for the second largest users after private motorbikes and private cars, from the total trips. City dwellers, such as company employees, students, and the most vulnerable residents rely heavily on buses for daily utility trips. Compared to men, women use buses more often with more diversified travel options. Trans Metro bus users travel evenly, especially in the morning when they go to work, and in the afternoon when they come home from work. Buses are the main transportation option for people aged 18-25 years. Thus, buses are the main choice for students and people with low and middle incomes, in supporting their daily activities.

Fleet and Infrastructure



Number of buses
95

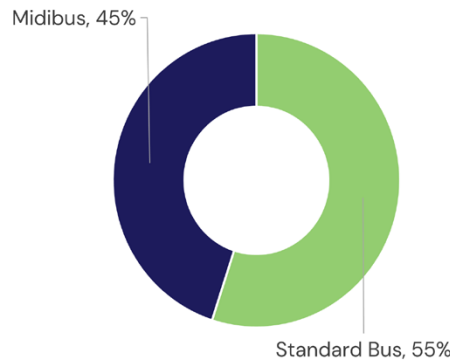


Number of routes
15

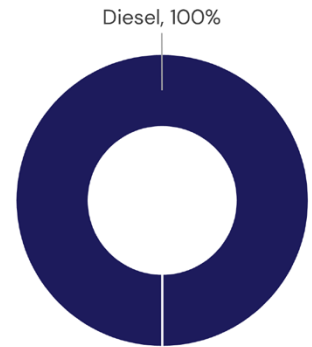


158 bus stops
1 bus depot

Buses by fleet type



Buses by fuel type



Quality of Service

Trans Metro Pekanbaru buses serve the city and suburbs. It provides services throughout the day and night, so that passengers feel safe and convenient. The services are relatively punctual and the buses are comfortable and secure for women, children, and the elderly. This can be proven by the percentage of bus occupancy during the trip. It is filled up to an average of 70%. Currently, most people from the middle and upper economic circles use private vehicles. The choice of people using private vehicles such as motorbikes and car is keeping in mind, time and cost efficiency. Using a bus is inefficient in terms of time and cost because most of the lines served by buses are not connected to most people's destinations, such as workplaces, shopping centers and schools. So if they use the bus, they still have to use other modes of transportation to reach their destination, which takes longer and costs more.



³ Transportation Agency of Pekanbaru, 2021

Existing Business Model⁴

A

Model A: Vertically integrated, private operator in BRT/integrated system

B

Model B: Divided responsibilities in BRT/integrated system

C

Model C: Large, more formal, private operator in traditional service

D

Model D: Small, informal, private operator in traditional service

E

Model E: Government-run system

E

The Pekanbaru City Government has the authority in terms of ownership, operation and maintenance of the Trans Metro Pekanbaru buses which have been granted from the Ministry of Transportation. All operational costs arising from the service activities of the Pekanbaru Trans Metro are borne by the Pekanbaru City Government. In terms of operating and collecting fees/tariffs for the service, the Pekanbaru City Transportation established the BLUD UPT Management of the Trans Pekanbaru, where every month, all service activities are reported to the Pekanbaru City Government. The central government through the Ministry of Transportation provides guidelines and directives on minimum service standards for BRT Bus services as an operational reference for the city of Pekanbaru. By implementing this management business model, the Government as the operator, can directly provide services to the community, without aiming for profit. On the other hand, using this scheme caused lack of competition among the operators to service the community.



⁴ Based on Accelerating a market transition in Latin America: New business models for electric bus deployment, P4G, Zebra and Dalberg, 2020

OPPORTUNITIES AND CHALLENGES FOR ADOPTION OF E-BUS FLEETS



Opportunities

- The city of Pekanbaru is committed to supporting the Central Government's target of realizing 100% electric buses in 2045 in every city of Indonesia.
- Today, the city of Pekanbaru has collaborated with private parties in compiling various studies on public transportation and electric buses, and conducting a study on the conversion of conventional buses to electric buses.
- The Central Government strongly supports the initiative of all cities wishing to adopt electric mobility, including converting conventional buses to electric buses.



Challenges

- The challenge faced by Pekanbaru city are related to the lack of local financing capabilities to support this activity.
- Pekanbaru city is still unable to make transportation sector the main economic activity because it is still focused on financing poverty alleviation pursuits, such as health services and improving the quality of education.
- Pekanbaru City does not have adequate human resource capacity as of now.
- There is an absence of private investments which can be helpful in supporting transition from conventional buses to electric buses.



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Authors: Selamet Daroyni, Happy Tiara Asvita (ICLEI Southeast Asia)

Contributor: Shumaila Afzal, Shivam Arora (ICLEI World Secretariat)

Editors: Sajili Oberoi, Alyssa Chenault (ICLEI World Secretariat)

Design: Paul Meyer, Olga Tokareva, Laura López (ICLEI World Secretariat)

Concept: Laura López (ICLEI World Secretariat)

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About the TUMI E-Bus Mission

Funded by the German Ministry for Economic Cooperation and Development (BMZ), a core group of organizations supports cities in their transition toward electric bus deployment. For more information please contact: tumi-network@iclei.org or visit <https://sustainablemobility.iclei.org/tumi-ebus-mission-2/>



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