



PPP-Based Transport Infrastructure Development in Eastern Indonesia: A Case Study of Makassar–Parepare Railway

Fathurrahman¹, Vivian Alvianti²

¹ Urban Planning and Design Research Group, School of Architecture, Planning, and Policy Development, Institut Teknologi Bandung (ITB), Indonesia

² Urban and Regional Planning, Faculty of Infrastructure and Regional Technology, Institut Teknologi Sumatera (ITERA), Indonesia

Corresponding author:

Fathurrahman | athybyrahman@gmail.com

ABSTRACT

The Makassar–Parepare railway project is Indonesia’s first Public-Private Partnership (PPP) initiative in the railway sector, with an investment value of IDR 1.1 trillion and operational costs of IDR 1.9 trillion. This study examines the relevance of Kingdon’s Multiple Streams Framework in public administration, particularly in the implementation of large-scale transport infrastructure. Using a qualitative-interpretative case study based on literature synthesis, the research shows that Kingdon’s framework is still relevant in explaining how policy decisions are shaped by contextual dynamics, actor interactions, and political opportunities. The findings highlight the important role of key actors in selecting governance models, as reflected in the partnership between the Ministry of Transportation and PT Celebes Railway Indonesia. This case demonstrates that governance choices influence agenda-setting and project implementation in infrastructure megaprojects. Overall, the study reveals that policy implementation is driven not only by the substance of policy problems but also by institutional interests, power relations, and strategic interactions among different actors.

Keywords: Infrastructure Policy; Kingdon’s Model; Megaproject; PPP

ABSTRAK

Pembangunan jalur kereta api Makassar-Parepare merupakan proyek Kerja sama Pemerintah dengan Badan Usaha (KPBU) pertama di Indonesia pada sektor perkeretaapian, dengan nilai investasi sebesar Rp1,1 triliun dan biaya operasional sebesar Rp1,9 triliun. Penelitian ini mengkaji relevansi Multiple Streams Framework yang dikembangkan oleh Kingdon, khususnya pada proyek pengembangan infrastruktur transportasi berskala besar. Dengan menggunakan pendekatan studi kasus kualitatif-interpretatif berbasis sintesis pustaka, penelitian ini menunjukkan bahwa kerangka Kingdon masih relevan untuk menjelaskan bagaimana sebuah kebijakan dibentuk oleh dinamika kontekstual, interaksi antara aktor kunci, dan peluang politik. Temuan penelitian menegaskan pentingnya peran aktor kunci dalam pemilihan model tata kelola, sebagaimana terlihat pada kemitraan antara Kementerian Perhubungan dan PT Celebes Railway Indonesia. Kasus ini menunjukkan bahwa pilihan tata kelola berpengaruh terhadap penetapan agenda dan implementasi proyek megainfrastruktur. Secara keseluruhan, penelitian ini mengungkapkan bahwa implementasi kebijakan tidak hanya ditentukan oleh substansi kebijakan, tetapi juga oleh kepentingan kelembagaan, relasi kuasa, dan interaksi strategis dari beberapa aktor.

Kata Kunci: Kebijakan Infrastruktur; KPBU; Megaprojek; Model Kingdon

ARTICLE HISTORY

Received: July 30, 2025

Revised: March 20, 2026

Published: June 20, 2026

Copyright © 2026, Journal of Infrastructure Policy and Management

CITATION (APA 7TH)

Fathurrahman & Alvianti, V. (2026). PPP-based transport infrastructure development in Eastern Indonesia: A case study of Makassar–Parepare railway. *Journal of Infrastructure Policy and Management*, 9(1), 1–18. <https://doi.org/10.35166/jipm.v9i1.117>

INTRODUCTION

The construction of transportation infrastructure megaprojects presents numerous challenges. Although the government has proposed various solutions to address these issues, the associated governance challenges are equally complex (Taki Imrani & Champagne, 2023). To overcome infrastructure deficits and the need to modernize existing public systems, Public-Private Partnership (PPP)—known in Indonesia as *Kerja sama Pemerintah dengan Badan Usaha* (KPBU)—initiatives have expanded globally since the 1990s. Many countries, particularly developing nations, have launched investment programs through collaboration with domestic and foreign partners to promote development. The nature and structure of this collaboration, as well as the involvement of institutional bodies, depend on government regulations and guidelines (Pradhan et al., 2022).

PPP represents an important form of collaboration between government agencies and private entities. This collaboration aims to facilitate the design, financing, construction, and operation of various projects, including those related to social and economic infrastructure development. In facing these complexities, public entities are actively strengthening partnerships with private companies to support infrastructure project financing using the PPP approach, as

highlighted by Amedanou (2023) and Pradhan et al. (2022). It is important to note that the specific arrangements of these partnerships can vary across countries, influenced by historical practices and by the distribution of responsibilities between the government and private institutions in providing services for the public interest (Viegas, 2010).

After a hiatus caused by the economic crisis in the late 1990s, the use of PPP re-emerged in 2005 with the introduction of a new policy framework under Presidential Decree No. 67 of 2005. This step was accompanied by the preparation of a catalog of projects proposed by the government, presented through the PPP Book or other designated lists (Wibowo, 2021). Through this initiative, the government seeks to improve the effectiveness and efficiency of infrastructure project execution and to create a more structured collaboration between public and private sectors to advance sustainable infrastructure development.

This article has two main objectives, i.e., to explain the emergence and formulation of the Makassar-Parepare railway development policy and to understand whether the choice of governance model is part of the solution to the problem by examining the PPP model. To achieve these objectives, the researcher developed an analytical framework based on Kingdon's Multiple Streams Framework and the PPP model.

In the context of this article, Eastern Indonesia (*Kawasan Timur Indonesia* or KTI) refers to the geographical region of Indonesia that administratively covers the eastern provinces, including Sulawesi, Maluku, Papua, and Nusa Tenggara. Historically, this region has faced more complex development challenges than the western region, such as limited basic infrastructure, low interregional connectivity, and economic and fiscal disparities. In the transportation sector, KTI often experiences isolation that affects population mobility and logistical efficiency, thereby requiring strategic and adaptive policy interventions.

KTI is positioned as a priority region for transportation infrastructure development, with the Makassar–Parepare railway project serving as a case study to examine the effectiveness of the PPP model. The project aims not only to improve regional connectivity in South Sulawesi but also to represent a new policy approach that combines innovative financing, collaborative governance, and institutional support to accelerate development in structurally limited areas. Thus, KTI in this article is not merely a geographical area but a symbol of the challenges and opportunities in inclusive infrastructure development in Indonesia.

The Makassar-Parepare railway development is the first project under the PPP scheme in the railway sector, with a capital expenditure (Capex) investment value of IDR 1.1 trillion and operational costs (Opex) of IDR 1.9 trillion. The project concession period lasts for 17 years (Minister of National Development Planning/Bappenas, 2023). Using the Availability Payment (AP) scheme, the project is intended to serve the South Sulawesi region, covering five regencies and cities: Maros, Pangkajene and Islands (Pangkep), Barru, Makassar, and Parepare. The project, which recently began operations

on the 80-kilometer Maros-Barru route, has incurred a total budget of IDR 9.2 trillion (Rustam, 2023). This megaproject is interesting to examine from a governance perspective as it is a Strategic Priority Project in Sulawesi, implemented through a partnership between the Indonesian Ministry of Transportation and the implementing business entity, PT Celebes Railway Indonesia.

The development of the Makassar-Parepare railway line is an integral part of the broader Trans-Sulawesi railway network. The primary objectives of this initiative are twofold: *first*, to improve the transportation of goods and passengers in order to contribute to national connectivity; and *second*, to align with national railway development targets to reach a total length of 10,524 km by 2030. The scope of the PPP includes the construction of Segment F, the operation and maintenance of railway tracks and operational facilities for Segments B, C, D, and F, as well as the construction of two passenger stations in Segment F (Minister of National Development Planning/Bappenas, 2023).

Through this paper, the author seeks to highlight how the Makassar–Parepare Railway development policy emerged and was formulated within the Kingdom’s Multiple Streams Framework, and to assess the extent to which the choice of the PPP governance model played a role in shaping the policy agenda for transportation infrastructure megaprojects in Indonesia. Taki Imrani and Champagne (2023) argue that without serious consideration of the choice of government model from the beginning of the decision-making process, it becomes much more difficult to align urban public transport policies of this scale within the government agenda. Based on these observations, the researcher argues that the choice of governance model for megaprojects is also a key factor in setting the policy agenda.

Following this introduction, the article is divided into four sections. The first section discusses the main theoretical concepts that form the theoretical framework of this article, particularly the PPP governance model. The second section presents the research strategy, which is based on case studies and documentary analysis. The third section presents the research findings on the role of the governance model selection during the agenda-setting phase of the railway megaproject. Finally, the last section discusses the conclusions drawn from this research.

This paper emphasizes that research linking PPP with theory-based policy analysis, particularly Kingdon's framework, remains limited. Thus, this article provides an academic contribution by integrating PPP governance analysis within a Kingdonian perspective to understand the agenda-setting process in transportation infrastructure megaprojects, particularly in the development of PPP projects in developing countries and in the context of infrastructure development planning in KTI.

LITERATURE REVIEW

This section discusses the central theme of this article, i.e., the concept of Public-Private Partnerships (PPP) as the preferred governance model for major urban public transport projects.

The Kingdon Model in the Context of Urban Public Transport

The Kingdon Model refers to the framework developed by John W. Kingdon to understand the policy-making process. This model is more commonly known as the Multiple Streams Framework (MSF) (Herweg et al., 2022). Kingdon's Multiple Streams framework is a widely used multi-theoretical approach that explains non-incremental policy change by synthesizing elements from

structural and institutional theories (Smith, 2018). The MSF is built on the concepts of timing and ambiguity and their impact on the policy process (Herweg et al., 2022).

Kingdon (1984) proposes a way to understand public policy agenda-setting by examining direct and indirect processes within the fragmented political system of the United States. His explanation of how agenda-setting functions focuses on three categories of independent variables that interact to produce "windows of opportunity" for agenda-setting. The problem stream, the policy stream, and the political stream each have specific characteristics. These streams flow through different channels and remain relatively independent of one another until, at a particular point in time, policy windows open. Only at that moment do the streams intersect (Béland & Howlett, 2016).

Under certain conditions, policy windows can be used by specific actors within a policy subsystem to advance engagement with issues they consider important. As Kingdon (1984) observed, during agenda-setting, the separate streams of problems, policies, and politics come together at certain times. Solutions become coupled with problems, and both are coupled with favorable political forces. Only then does an issue become a recognized problem on the official or institutional agendas, and the public policy process begins to address it (Béland & Howlett, 2016).

Kingdon (1984) suggested that the opening of a policy window may sometimes be triggered by seemingly unrelated external focusing events, such as crises, accidents, or the presence or absence of "policy entrepreneurs" both inside and outside government (Béland & Howlett, 2016). Policy entrepreneurs play a vital role in shaping these streams and their intersection by "coupling" policy problems and policy

solutions together with political opportunities. In this regard, policy entrepreneurs demonstrate the central role of agency within the MSF.

Based on the description of the MSF developed by Kingdon, the model can be schematically illustrated as an interaction among three main streams that operate relatively independently:

1. The problem stream reflects issues identified as public problems that need to be addressed.
2. The policy stream contains a collection of ideas, solutions, and policy alternatives developed by the policy community.
3. The political stream includes political dynamics, such as changes in government, pressure from interest groups, and public opinion.

These three streams flow in parallel and are not always interconnected. However, at certain moments, a crossover or convergence occurs, known as a policy window. This policy window refers to a point in time when an opportunity to set a policy agenda opens, allowing available solutions to be linked to recognized problems and supported by favorable political conditions. In this process, policy actors known as policy entrepreneurs play a crucial role in connecting the three streams. They act as catalysts who use momentum and opportunities to push a specific issue onto the government's official agenda.

Thus, the schema of Kingdon's model can be understood as a dynamic structure consisting of three independent streams that occasionally intersect through policy windows, with the active involvement of policy actors who help unify problems, solutions, and political support. This model emphasizes the

importance of timing, opportunity, and agency in the public policy agenda-setting process, which shows that policy change is often non-incremental and influenced by complex contextual configurations.

Public-Private Partnership (PPP) Concept

In general, PPP is a contractual agreement between the public and private sectors that allow for greater private sector participation than conventional practices. The agreement generally involves government agencies contracting private companies to renovate, construct, operate, maintain, and/or manage specific facilities or systems. Although the public sector usually retains ownership of the facilities or systems, the private party is granted additional decision-making authority in determining how projects or tasks are completed (Dong et al., 2016).

PPP in infrastructure development, which is implemented in developed and developing countries, has produced diverse and successful outcomes. PPP significantly increases the value and effectiveness of projects across various sectors. These sectors range from transportation, such as highways, bridges, ports, airports, and railways, to utilities, including electricity, water supply, and waste disposal, as well as telecommunication networks, information technology services, and social infrastructure, such as schools, hotels, hospitals, prisons, and military facilities (Zhang, 2005). Although existing studies have discussed the successful application of PPP across various sectors, research has not yet fully explained its implementation in the context of developing countries with limited institutional capacity.

PPP can be viewed as an institutional approach suitable for addressing specific market failures by fostering fairness and shared responsibility in transactions between public and private entities through

collaborative efforts (Pongsiri, 2002; Wang et al., 2018). The inherent value of the PPP concept primarily lies in mutual benefit. Given that the government’s role in such partnerships includes service provision, market oversight, the establishment of a clear regulatory framework is necessary. A strong framework enhances government benefits by ensuring that essential partnerships operate effectively and by optimizing available resources in line with broader policy objectives, ranging from social policy to environmental protection (Pongsiri, 2002).

The Concept of PPP in Indonesia

Formally, the development of cross-sectoral policies on PPP began in 1998 with the issuance of Presidential Decree Number 7 of 1998, which outlined regulations governing PPPs in infrastructure provision. Following the issuance of this initial framework, the implementation of PPP policies in Indonesia has undergone various changes.

To achieve the GDP growth targets and the medium-scenario infrastructure stock stipulated in the National Medium-Term Development Plan (RPJMN) 2020–2024, a total investment of IDR 6,445 trillion is required for infrastructure development, with an average of 6.2% of GDP. However, the government’s financial capacity for infrastructure development is limited to IDR 2,385 trillion, covering only 37% of the total requirements for the 2020–2024 RPJMN period. Addressing this gap requires an innovative approach involving non-budgetary

funds and the private sector, which are essential for financing the 63% of the infrastructure development needs (Minister of National Development Planning/Head of National Development Planning Agency, 2023).

Considering the budgetary limitations in driving Indonesia’s economic transformation, the Government of Indonesia acknowledges the importance of private sector involvement in infrastructure provision. Therefore, to optimize public services while fostering close cooperation with the private sector, the government is promoting various efforts to overcome these budgetary constraints.

PPP as an Alternative Financing Mechanism for Infrastructure Project Development

In the Indonesian context, PPP is defined as a type of financing cooperation between the government and business entities in infrastructure provision. Its objective is to provide flexibility for the government to partner with the private sector based on the principle of balanced risk allocation. The implementation of this scheme is regulated under Presidential Regulation Number 38 of 2015 (Arifin et al., 2024; Siagian, 2017).

In accordance with Presidential Regulation Number 38 of 2015, there are two distinct schemes for PPP project proposals: solicited and unsolicited. Solicited projects are initiated by the government, while unsolicited projects are initiated by the private sector.

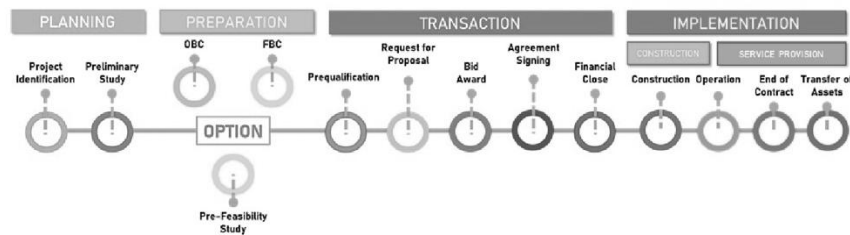


Figure 1. Project flow for government-initiated / solicited PPP proposals (Bappenas, 2023)

As stipulated in the Minister of National Development Planning Regulation Number 2/2020, the PPP project pipeline for solicited proposals consists of four main stages:

planning, preparation, transaction, and implementation (Minister of National Development Planning/Head of National Development Planning Agency, 2023).

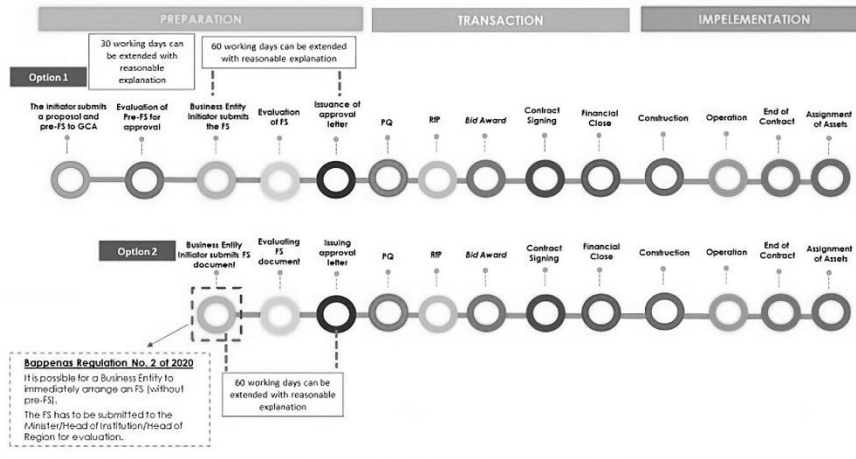


Figure 2. Project flow for private sector-initiated / unsolicited PPP proposals (Bappenas, 2023)

Unsolicited PPP proposals are initiated by the private sector or project proponents. The process for unsolicited projects involves three main stages: preparation, transaction, and implementation. The preparation stage is conducted by the private sector as the proposal initiator. In this article, we argue that policymakers’ inclination toward the PPP governance model at the inception of transportation megaprojects shapes the selection of policy solutions.

DISCUSSION/ANALYSIS

Research Strategy

In this research, the researcher developed an analytical framework based on the Kingdon model within the concept of PPP. This research uses the Kingdon model as a framework to understand the factors that determine the convergence of three interconnected streams. This convergence is regarded as the opening of a “window of opportunity” to pursue policy solutions (Taki Imrani & Champagne, 2023). Based on the Kingdon-inspired framework, this analysis is

structured around the behavior of policy actors and the flow of problems, solutions, and policy contexts, to which a governance stream is added. These streams help explain the creation of windows of opportunity in the process of setting the public policy agenda.

The methodology is based on a case study (Navalersuph & Charoenngam, 2021; Taki Imrani & Champagne, 2023) concerning the implementation of the Makassar–Parepare Railway Development Project, specifically Segment F, as well as the operation and maintenance (O&M) of railway tracks and operational facilities for Segments B, C, D, and F, and the construction of two passenger stations in Segment F. This megaproject is highly relevant to examine from a governance perspective because it is a Strategic Priority Project in the Sulawesi region, implemented through a partnership between the Ministry of Transportation of the Republic of Indonesia and the implementing business entity, PT Celebes Railway Indonesia (PT CRI). PT CRI’s scope of work includes infrastructure construction for Segment F and the O&M of infrastructure for Segments B, C, D, and F of

the Makassar–Parepare line (Minister of National Development Planning/Bappenas, 2023).

The researcher employs a qualitative-interpretative analysis based primarily on document examination, as practiced by Taki Imrani and Champagne (2023). These documents include internal publications from public or private entities and media reviews. Additional sources, such as peer-reviewed articles, research papers, and analytical reports, contribute to a deeper understanding of the primary materials by helping interpret the data contained within them.

The period of 2002–2023 for literature search activities was selected by considering the growing discussions on the pressure faced by public authorities in addressing transportation challenges and regional disparities. This timeframe provides an opportunity to analyze project-related issues, including the stage at which the project first entered the policy agenda, particularly during the selection of the railway mode as a policy solution. Media reviews covering the 2014–2019 period focus on the physical realization of the Makassar–Parepare railway line.

During the above periods, the search covers implementation aspects and how the project was received by the public and other stakeholders. Meanwhile, the 2019–2023 timeframe concerns the PPP scheme and covers the operational phase of the Maros Station–Barru Garungkong Station route. The selection of this period is based on the significance of the shift toward private sector involvement in transportation infrastructure projects and the extent to which this shift influenced the sustainability and effectiveness of project implementation.

Regarding the role of the Kingdon model in the Makassar–Parepare railway PPP project, the researcher conducted analysis based on

the Multiple Streams Framework (MSF), with the addition of one essential element: the governance stream. This framework is used to understand the convergence among the problem stream, policy solutions, political dynamics, and the governance model used in the project. Such convergence is understood as the opening of a policy window that allows an issue to enter the public policy agenda.

This study adopts a qualitative-interpretative approach using a case study method, in which the primary data sources consist of policy documents, institutional publications, and media reviews. To maintain the validity and reliability of the analysis, the researcher applies a pattern-matching technique between the empirical elements found in the documents and the components of the MSF. The analytical procedure is conducted through thematic coding of the document content, focusing on the identification of policy narratives, actor roles, stream dynamics, and governance structures. The document inclusion criteria include direct relevance to the Makassar–Parepare project, link with the PPP scheme, and contribution to the understanding of the policy agenda. Documents that are general, not project-specific, or do not contain interpretable policy information are excluded from the analysis.

As mentioned previously, the literature search period was established between 2002 and 2023. The period was filled by the evolution of policies and public discourse on infrastructure development in KTI. The period is divided into three phases: the initial transportation mode assessment phase (2002–2011), the project’s physical realization phase (2014–2019), and the PPP implementation and service operation phase (2019–2023). Each phase is analyzed to identify patterns of interaction among the streams in the MSF and to examine how policy actors used windows of opportunity to advance the project agenda.

Through this approach, the resulting inferences are not merely declarative but are based on a systematic analytical process, so that they strengthen the validity and theoretical contribution and of the research findings.

Case Analysis

The Makassar–Parepare Railway PPP Project is implemented by PT Celebes Railway

Indonesia (CRI). This project covers various scopes of work, primarily focusing on infrastructure construction for both Segment F (Tonasa) and the Garongkong segment. The project also includes ongoing responsibility for the operation and maintenance (O&M) of infrastructure for Segments B, C, D, and F (Tonasa). The estimated project cost is USD 138.58 million.

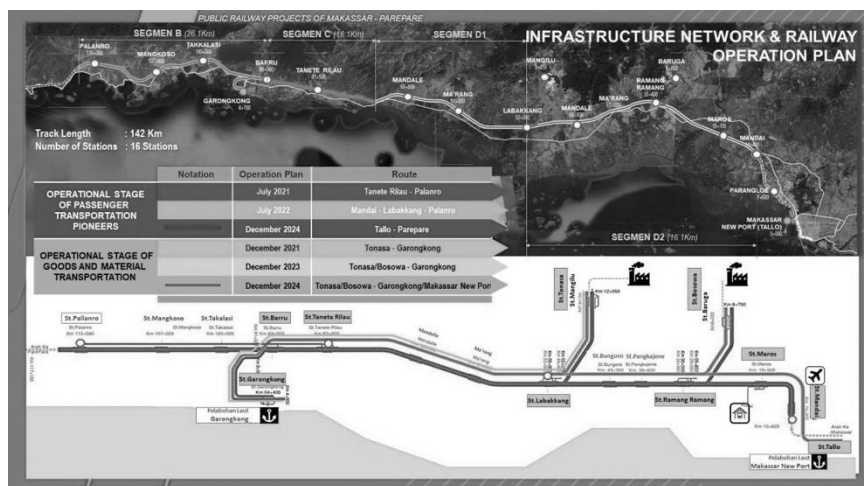


Figure 3. Makassar-Parepare Railway Line Project (PT CRI, 2020)

Policy Actors of the Makassar-Parepare Railway

The first policy actor is PT Celebes Railway Indonesia (CRI). PT CRI's services include the construction, operation, and maintenance of the Makassar–Parepare railway infrastructure under a PPP scheme between the Ministry of Transportation and the company (PT CRI, 2020). Established on February 6, 2019, CRI operates as a limited liability company with a shareholding structure consisting of four companies: PT PP (45%), PT Bumi Karsa (22.5%), PT CCCEI (22.5%), and PT Iroda Mitra (10%). PT CRI focuses on various activities, including infrastructure development for Segment F of the Makassar–Parepare railway line (PT CRI, 2020). CRI pioneered this scheme through the Makassar–Parepare Railway project, which encountered numerous challenges

during the process, particularly in terms of financing (Adam et al., 2023; Ariana, 2024).

The second policy actor is the sixth president, Susilo Bambang Yudhoyono. The assessment of the Trans-Sulawesi railway line began as early as 2002, continued in 2004, and was pursued more systematically starting in 2011. In that year, the project was included in the 2011–2030 National Railway Master Plan prepared by the Directorate General of Railways of the Ministry of Transportation. The Susilo Bambang Yudhoyono administration showed strong commitment to preparing the Trans-Sulawesi railway because of its significant economic impacts on the community. The primary objective of this project was to boost the economy of South Sulawesi in particular and to connect regions or urban centers within the area (Hidayat, 2014).

The third policy actor is the seventh president, Joko Widodo (Jokowi). Jokowi's leadership emphasized national infrastructure development focusing on railway projects. One prominent initiative was the Makassar–Parepare railway project in South Sulawesi. The groundbreaking ceremony for this project took place on August 12, 2014, at the beginning of President Joko Widodo's term (Bureau of Communication and Public Information, 2014). The first step in implementation was the laying of the first rail on Friday, November 13, 2015, in Lalabata Village, Barru Regency. The limited operation of the Garongkong–Mangilu Station segment began on October 29, 2022. During this initial operational phase, occupancy rates reached 100% on weekends (Ubaidillah, 2022).

The total investment for the Makassar–Parepare railway project reached IDR 9.28 trillion, sourced from the State Budget (APBN), PPP financing, land acquisition conducted by the State Asset Management Agency (LMAN), and the Regional Budget (APBD). After a long process, the official inauguration of the Makassar–Parepare line for the Maros–Barru Intercity Train and the Maros Railway Depot was held on March 29, 2023, in Maros Regency, South Sulawesi (Setpres, 2023).

Factors Related to the Policy Framing of the Makassar-Parepare Railway

The author examines the implementation of the Makassar-Parepare Railway Project proposed by the Ministry of Transportation. To better understand this project and the governance model proposed by the Ministry, the author analyzes the pre-decision processes that enabled this policy to enter the agenda. The study applies Kingdon's framework by examining the problem, policy, and political streams.

1. Problem Stream

This project is part of the Trans-Sulawesi railway network, which is expected to generate economic benefits along the route in South Sulawesi. The Makassar–Parepare Railway was built to improve national connectivity and competitiveness (Bappenas, 2025). South Sulawesi has experienced economic growth above the national average, which indicates growth in various sectors, including transportation. The province has two major cities: Makassar and Parepare. Economically, Makassar serves as the largest distribution service hub due to its comparative geographical advantage in Eastern Indonesia, while Parepare plays an important role in supporting the functions of the capital city (Yusuf, 2022).

However, the construction of the Trans-Sulawesi railway from Makassar to Parepare has faced scrutiny for its slow progress and failure to meet the established targets (Mirsan, 2022). One contributing factor is the substantial investment required for the project (Tempo, 2017). The project requires significant financial resources, which has become a major obstacle. In addition, land acquisition performance is considered slow. Uncertainty in land procurement can lead to construction delays, hinder project progress, and ultimately affect the achievement of time targets (Redaksi Walai, 2022).

Furthermore, the Williamson Inequality Index of South Sulawesi increased to 0.568 in 2021 compared to the previous year. Although this indicates an increase in development performance, it also shows that equitable development among regencies/cities in South Sulawesi has not yet been optimally achieved. Currently, interregional accessibility in South Sulawesi still relies on provincial and interprovincial road-based public transportation. To promote more effective and

efficient accessibility, mass transportation infrastructure in the form of an intercity public railway network connecting Makassar and Parepare is required (South Sulawesi Provincial Government, 2016).

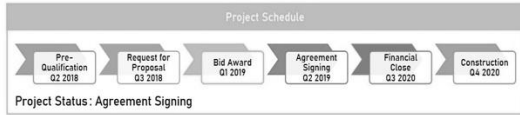


Figure 4. Project schedule of the Makassar-Parepare Railway (Minister of National Development Planning/Head of National Development Planning Agency, 2020)

	Model Tradisional	Model PPP	Model KPBU PT CRI
Perencanaan dan Pembiayaan			
Kewajiban Perencanaan	Pemerintah	Pemerintah	PT CRI + Mitra
Sumber Pembiayaan	Utang Publik Baru	Subsidi federasi dan provinsi mencakup sebagian biaya (variabel)	PT CRI + Mitra (PT PUI/IGF, PT SMI, PT BSI)
Pelaksanaan			
Kewajiban konstruksi	Pemerintah	Konsorsium swasta	PT CRI + Mitra
Pengoperasian			
Pengoperasian Proyek	Pemerintah	Konsorsium swasta	PT CRI + Mitra
Kendali pemegang saham	Pemerintah	Konsorsium swasta	PT CRI + Mitra
Asset dalam neraca keuangan pemerintah	Ada	Ada	Ada
Kepemilikan aset	Pemerintah	Konsorsium swasta (35 tahun) kemudian dilanjutkan oleh pemerintah	Masa konsesi proyek ini berlangsung selama 17 Tahun

Figure 5. Comparison between PPP models at PT CRI with others models (Taki Imrani & Champagne, 2023)

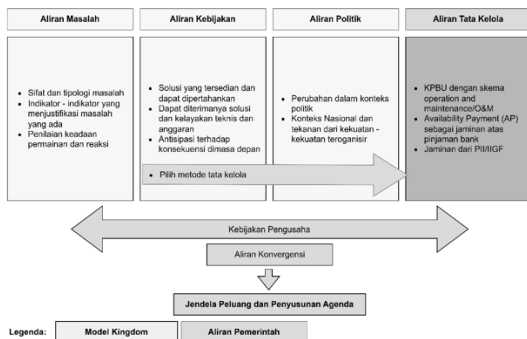


Figure 6. The Kingdon model revisited through the governance stream of the Makassar-Parepare Railway Project (Taki Imrani & Champagne, 2023)

In proposing new policies, Kingdon highlights the crucial role of stakeholders and public response. Consequently, policymakers use statistical data to illustrate the potential negative consequences if problems persist. This approach helps them position their preferred policy solutions as the best alternatives for mitigating those issues (Taki Imrani & Champagne, 2023).

The Makassar-Parepare Railway Project is an example of a project intended to support regional economic growth as well as to enhance the movement of goods and passengers (Yusuf, 2022). Several key aspects of this project include the following (Ministry of Finance, 2022):

- The project development uses a PPP scheme, with the Ministry of Transportation acting as the Government Contracting Agency (*Penanggung Jawab Proyek Kerja Sama* or PJKP), and a concession period of 17 years;
- The indicated investment value is IDR 1 trillion, and the project is expected to use an Availability Payment scheme. It is intended to promote national connectivity and stimulate regional economic growth
- Stakeholder involvement and public response are necessary to ensure that the project achieves both government and community objectives while minimizing potential negative impacts during the construction and operational phases. Therefore, the use of statistical data and a policy approach that prioritizes the most effective solutions is vital to achieving the objectives of this project.

2. Policy Stream

In Kingdon's model, to adopt a public policy, policymakers must navigate a series of stages involving policy identification, formulation, and adoption. A key aspect of this process is the ability of policymakers to justify their proposed solutions (Taki Imrani & Champagne, 2023). The Makassar-Parepare Railway project faces new challenges as it involves a new investment scheme. Innovative solutions are required, particularly in relation to financing, which may involve the establishment of new financial structures or the development of conventional models.

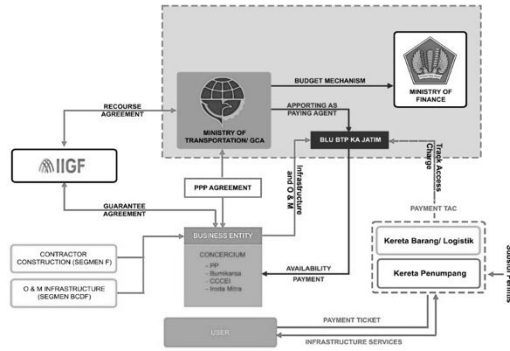


Figure 7. Project structure of the Makassar-Parepare Railway (Minister of National Development Planning/Head of National Development Planning Agency, 2025)

The Makassar–Parepare Railway project is a PPP financing-based project that involves CRI as the implementing business entity, together with PT Indonesia Infrastructure Finance (IIF), PT Sarana Multi Infrastruktur (SMI), and PT Bank Syariah Indonesia (BSI). In implementing the project, the Ministry of Transportation received support from the Ministry of Finance through the Project Development Facility (PDF), with PT Penjaminan Infrastruktur Indonesia (PII) assigned as the facility coordinator. The PDF facility covers various project stages, from the preparation of the Final Business Case to Financial Close (Adam et al., 2023). This project serves as an example of successful creative non-state budget financing in Indonesia and is expected to have a positive impact on the economy of South Sulawesi. In this context, several funding innovations emerged, particularly in relation to the banking sector (Adam et al., 2023).

The first innovation is the guarantee from PII, which provided an extra yet vital layer of security. This guarantee refers to risk protection given to the implementing business entity to complement government commitments, aiming to increase investor confidence and project bankability.

The second innovation is the Availability Payment (AP) scheme. In the context of the

Makassar–Parepare Railway, AP is not a direct guarantee for bank loans but a scheme for periodic payments from the government to the implementing entity based on the availability of agreed infrastructure services. This scheme reflects a shift from traditional financing approaches that rely on direct user revenue, such as fares or ticket sales.

The third innovation is the accelerated payment. The project introduced an accelerated payment scheme that differs from standard payment schedules.

The Makassar–Parepare Railway project requires an investment of approximately USD 138.58 million and will be operated by the designated party under a 17-year concession agreement. This illustrates the scale of investment and the management period before possible changes in ownership or operation occur. The project demonstrates positive financial feasibility, with an Internal Rate of Return (IRR) of 11.76% and a Net Present Value (NPV) of approximately USD 3.46 million (Bappenas, 2023), which indicate the financial viability and profit potential of the investment.

3. Political Stream

The political context plays a vital role in both the problem and policy streams. Factors such as shifts in public opinion, government positions, and pressure from organized political forces influence policy dynamics (Taki Imrani & Champagne, 2023). Thus, understanding this political context is important to understand the flows of problems and policies comprehensively.

In the political stream, support from various institutional actors is a crucial factor in opening a policy window. The Makassar–Parepare Railway project gained support from the central government, provincial government, and regency/city governments

along the route. This support is reflected in the project's integration into the national development agenda and regional development planning.

Within the MSF, this configuration of political support strengthened policy momentum as it allows the project to enter the national transportation development priority agenda. The support of the Regional House of Representatives in the construction of the Makassar–Parepare Railway represents a legislative function that aligns national strategic policies with the real needs of local communities. Politically, this support is crucial because the project must be integrated into the Regional Long-Term Development Plan (*Rencana Pembangunan Jangka Panjang Daerah* or RPJPD) as part of South Sulawesi's macro-transportation vision and further detailed operationally in its medium-term development plan. Without synchronization within these regional planning documents, the project would struggle to gain budgetary legitimacy through the Regional Budget, especially for supporting infrastructure such as station access roads, feeder transport, and Transit-Oriented Development (TOD) around stations.

Furthermore, the involvement of the Regional House of Representatives in the political stream ensures synergy between central planning through the National Medium-Term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional* or RPJMN) and local interests in regencies such as Maros, Pangkep, and Barru. The legislative role in ratifying Regional Regulations on Spatial Planning (*Rencana Tata Ruang Wilayah* or RTRW) provides the primary legal basis for land acquisition, thereby minimizing regulatory obstacles at the ground level. By integrating this project into the RPJMD, the Regional House of Representatives helps guarantee development

sustainability despite regional leadership transitions by ensuring that the railway provides measurable economic impacts for logistics connectivity and population mobility in South Sulawesi.

At the national level, the Directorate General of Railways acts as the policymaker and planner for rail-based transportation systems. However, the political stream at the national level functions as a general policy environment. Conversely, as the first PPP project in the railway sector, the Makassar–Parepare project has specific strategic characteristics. In this context, the political stream plays a more active and direct role because the project serves as a symbol of the success of the PPP scheme and as a national pilot project. Political will encouraged a more structured PPP design, including the use of AP and clear risk allocation through institutional support such as the PDF and PII.

The Choice of Governance Model

Following the three streams proposed by Kingdon, Taki Imrani and Champagne (2023) suggest adding the fourth stream: the choice of governance model during the agenda-setting phase. They argue that the PPP governance model plays a vital role in opening the window of opportunity for this megaproject. This model differs significantly from conventional models, in which the government bears full responsibility, and also differs from traditional PPP models in terms of its structured relationship with the government.

In the implementation of the Makassar–Parepare Railway, the central government, local governments, and various agencies engage in collaborative works. The adopted governance model includes cross-sectoral cooperation involving the Ministry of Transportation, the Directorate General of Railways, the Railway Engineering Bureau, and local governments, including South

Sulawesi Province, Makassar, Parepare, and Maros (BPKP, 2017).

The President of Indonesia highlighted this railway as a transportation option that not only facilitates mobility but also reduces logistics costs. By involving various ministries and local governments, the project demonstrates a holistic approach to infrastructure development. Under this model, cross-institutional governance oversees the project to ensure efficient execution and monitor the use of funds in order to enhance regional competitiveness.

Opening the Window of Opportunity

In Kingdon's framework, a "window of opportunity" occurs when the three, or in this case four, streams converge. In the Makassar-Parepare project, the policy window opened through the interaction and convergence of these streams. The project is expected to provide significant economic and social benefits, with an estimated social benefit value of IDR 2.51 trillion (Sardi, 2022).

Beyond its economic impact, the project is expected to drive regional growth through improved access, travel time savings, and logistical cost efficiency. It is also considered a contributor to the Sustainable Development Goals (SDGs), particularly in relation to decent work and economic growth (Yusuf, 2022). The presence of railway services is expected to stimulate the movement of people and goods, support regional tourism, create new jobs, and develop Micro, Small, and Medium Enterprises (MSMEs) around stations. Thus, the project aims to promote economic progress, to improve community welfare, and support environmental preservation. These aims reflect the government's strong commitment to realize sustainable development.

CONCLUSION

This research examines the relevance and utility of the MSF, as developed by Kingdon, in the context of public administration, specifically in relation to the implementation of transportation infrastructure megaprojects in Indonesia. This study focuses on the Makassar-Parepare Railway project as a case study, which serves as the first pilot project under the PPP scheme in the railway sector. Through a qualitative approach based on document analysis, this research finds that the central hypothesis of the Kingdon model tends to be confirmed: public policy is not always the result of a rational and inclusive deliberative process; rather, it is often opportunistic and influenced by political momentum, institutional windows, and the configuration of the actors involved.

One of the main theoretical contributions of this research is the expansion of the MSF model by proposing the governance stream as an additional element that influences policy agenda-setting. The governance stream refers to the choice of governance model used in the project, including financing schemes, risk allocation, and institutional structures. In the case of Makassar-Parepare, the selection of the PPP scheme with the AP mechanism and guarantee support from institutions such as PII and PDF proved to be key factors in opening the policy window. The convergence of the governance, problem, and political streams created conditions that allowed this project to be implemented more rapidly and efficiently than conventional approaches.

This research also highlights the critical role of actors in the policy decision-making process. Actors from various institutions, such as the Ministry of Transportation, the Ministry of Finance, the implementing business entity, and financial support institutions, exert significant influence in determining policy

direction and project design. The interactions, interests, and political power of each actor are decisive factors in choosing the governance model and implementation strategy. These findings reinforce the argument that, in the context of public administration, policy decisions are influenced not only by the substance of the problem but also by power dynamics and institutional configurations.

Conversely, this research identifies limitations in the autonomy of local governments in megaproject governance, despite the fact that they are the most affected parties and have a direct interest in the project's success. Local government involvement tends to be passive, limited to technical execution and impact management, without sufficient space in the planning and strategic decision-making processes. In addition, financial aspects are found to be the ultimate determinants of project feasibility and sustainability. Financing structures, risk guarantees, and payment mechanisms are crucial elements that affect investment decisions and successful implementation.

The policy implications of these findings suggest that the central government needs to provide more space for local governments in megaproject governance, including in planning, decision-making, and oversight. Furthermore, transparency in the AP scheme and government guarantees must be strengthened to enhance accountability and prevent political risks or potential corruption. The government must also ensure that the institutional designs and governance models used are capable of addressing local challenges and strengthening regional institutional capacity.

In the context of the political stream, political support from various institutional actors is a vital factor in opening policy windows. The Makassar-Parepare Railway project gained

support from the central government, provincial government, and regency/city governments along the project route. This support is reflected in the project's integration into the national development agenda and regional development planning. Within the MSF, this configuration of political support strengthened policy momentum, enabling the project to enter the national transportation development priority agenda.

The limitation of this research lies in its document analysis-based methodological approach; therefore, the resulting interpretations may not fully reflect the empirical dynamics on the ground. As the consequence, further validation through in-depth interviews with key actors, as well as quantitative analysis of project and financing data, is highly recommended to strengthen these findings and broaden their generalizability.

To strengthen the result of this analysis, future researchers are suggested to compare this project with other PPPs in the transportation sector or other infrastructure sectors in Indonesia. They may also benchmark it against megaproject governance practices in other countries with similar institutional and political contexts.

ABOUT THE AUTHORS

Fathurrahman is a graduate of the Master's Program in Urban and Regional Planning at Institut Teknologi Bandung (ITB). He currently serves as a research fellow in the Urban Planning and Design Research Group, SAPPK ITB.

Vivian Alvianti is a graduate of the Master's Program in Urban and Regional Planning at Institut Teknologi Bandung (ITB). She currently serves as a lecturer in Urban and Regional Planning at Institut Teknologi Sumatera (ITERA).

REFERENCES

- Adam, H., Wang, H., Fauziah, M., & Suhadi, O. (2023). PPP as a creative financing innovation in the financing of Makassar Parepare railway infrastructure. *International Journal of Business and Applied Economics*, 2(3), 419–436. <https://doi.org/10.55927/ijbae.v2i3.4265>
- Amedanou, Y. M. I. (2023). Financing the economy in debt times: The crucial role of public–private partnerships. *Research in Economics*, 77(3), 295–309. <https://doi.org/10.1016/j.rie.2023.05.003>
- Amoli, S. J., & Aghashahi, F. (2016). An investigation on strategic management success factors in an educational complex. *Journal of Social and Behavioral Sciences - Procidia*, 230, 447–454. <https://doi.org/10.1016/j.sbspro.2016.09.056>
- Ariana, L. (2024). Public-private partnership pembangunan infrastruktur: Dilema etik dan praktik. *Journal of Infrastructure Policy and Management*, 7(1), 1–12. <https://doi.org/10.35166/jipm.v7i1.54>
- Arifin, B., Horisonta, S., Juanda, J., Rahman, A. B., Julihandono Sj, C., Atmodjo, S. Y. P., & Maulida, A. (2024). Infrastruktur konektivitas, peran pemerintah, dan perkembangan sosial ekonomi regional: Bukti dari Kalimantan. *Journal of Infrastructure Policy and Management*, 7(1), 13–26. <https://doi.org/10.35166/jipm.v7i1.55>
- BPKP. (2017). *Peran pengawasan BPKP Sulsel mengawal proyek pembangunan jalur kereta api Makassar–Parepare*. Paraikatte, 27. <https://id.scribd.com/document/386161989/Paraikatte-Edisi-27-Web>
- Béland, D., & Howlett, M. (2016). The role and impact of the multiple-streams approach in comparative policy analysis. *Journal of Comparative Policy Analysis: Research and Practice*, 18(3), 221–227. <https://doi.org/10.1080/13876988.2016.1174410>
- Biro Komunikasi dan Informasi Publik. (2014, August 8). *12 Agustus, groundbreaking rel kereta api Makassar-Parepare*. Kementerian Perhubungan Republik Indonesia. <https://dephub.go.id/post/read/12-agustus-groundbreaking-rel-kereta-apimakassarparepare-63126>
- Dong, Z., Wang, M., & Yang, X. (2016). Comparative study of China and USA public private partnerships in public transportation. *Journal of Modern Transportation*, 24(3), 215–223. <https://doi.org/10.1007/s40534-016-0105-7>
- Herweg, N., Zahariadis, N., & Zohlnhöfer, R. (2022). Travelling far and wide? Applying the multiple streams framework to policy-making in autocracies. *Politische Vierteljahresschrift*, 63(2), 203–223. <https://doi.org/10.1007/s11615-022-00393-8>
- Hidayat, F. (2014, August 14). *Sejarah baru jalur kereta api Trans Sulawesi*. Kompasiana. <https://www.kompasiana.com/firdaushidayat/54f672f4a333117d028b4d21/sejarahbaru-jalur-kereta-api-trans-sulawesi>
- Ministry of National Development Planning/National Development Planning Agency. (2020). *Public private partnership: Infrastructure projects plan in Indonesia 2020*. https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Panduan_Perencanaan/PPP%20BOOK%202020%20Kepmen%20PPN%20No%2022%20dan%2061%20Tahun%202020.pdf
- Ministry of National Development Planning/National Development Planning Agency. (2023). *Public private partnerships: Infrastructure project plan in Indonesia 2023*. https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Unit_Kerja/Direktorat%20Pengembangan%20Pendanaan%20Pembangunan/PPP%20Book%202023.pdf

- Mirsan, A. (2022, December 14). *Soroti pembangunan rel kereta api Makassar–Parepare, BHS: Tidak efektif dan efisien*. Fajar Network. <https://fajar.co.id/2022/12/14/soroti-pembangunan-rel-kereta-api-makassarparepare-bhs-tidak-efektif-dan-efisien/>
- Navalersuph, N., & Charoenngam, C. (2021). Governance of public–private partnerships in transportation infrastructure projects based on Thailand’s experiences. *Case Studies on Transport Policy*, 9(3), 1211–1218. <https://doi.org/10.1016/j.cstp.2021.06.008>
- Pemerintah Provinsi Sulawesi Selatan. (2016). *Rencana kerja pemerintah daerah Provinsi Sulawesi Selatan tahun 2016*. <https://peraturan.bpk.go.id/Details/108879/pergub-prov-sulawesi-selatan-no-38-tahun-2016>
- Pongsiri, N. (2002). Regulation and public-private partnerships. *International Journal of Public Sector Management*, 15(6/7), 487–495. <https://doi.org/10.1108/09513550210439634>
- PT CRI (Celebes Railway Indonesia). (2020). *Our business: Pembangunan, perawatan, pengoperasian*. <https://pt-cri.com/our-business/>
- Redaksi Walai. (2022, July 7). *Makassar terancam tak miliki stasiun kereta api, akibat lambannya penetapan lokasi lahan*. Walai. <https://walai.id/2022/07/07/makassar-terancam-tak-miliki-stasiun-kereta-api-akibatlambannya-penetapan-lokasi-lahan/>
- Rustam, R. (2023, March 29). *Kereta api Makassar-Parepare beroperasi rute Maros-Barru, habiskan Rp9,2 T*. detik Sulsel. <https://www.detik.com/sulsel/bisnis/d-6645207/kereta-api-makassar-parepareberoperasi-rute-maros-barru-habiskan-rp-9-2-t>
- Sardi, M. (2022, December 6). *Proyek kereta api Makassar–Parepare mendorong pertumbuhan ekonomi Sulsel*. RM.id Rakyat Merdeka. <https://rm.id/baca-berita/nasional/151905/proyek-kereta-api-makassarpareparemendorong-pertumbuhan-ekonomi-sulsel>
- Setpres (Sekretariat Presiden Republik Indonesia). (2023, March 29). *Presiden Jokowi resmikan pengoperasian jalur kereta api lintas Makassar-Parepare*. Presiden Republik Indonesia. <https://www.presidentri.go.id/siaran-pers/president-jokowi-resmikan-pengoperasianjalur-kereta-api-lintas-makassar-parepare/>
- Siagian, E. S. (2017). Public-private partnerships in Indonesia: A comprehensive legal framework of significance to action and analysis. *Asia Pacific Journal of Public Administration*, 39(1), 72–78. <https://doi.org/10.1080/0142159X.2017.1294395>
- Smith, V. (2018). Analysing public policy: Does Kingdon’s multiple streams framework help? In *Bargaining power* (pp. 9–20). Springer Singapore. https://doi.org/10.1007/978-981-10-7602-2_2
- Taki Imrani, M. K., & Champagne, E. (2023). The role of governance models in the development of transport infrastructure megaprojects in Greater Montreal: The case of the Réseau express métropolitain. *Frontiers in Political Science*, 5, Article 1156096. <https://doi.org/10.3389/fpos.2023.1156096>
- Tempo. (2017, October 30). *Proyek rel kereta Sulawesi Selatan lambat*. Koran Tempo. <https://koran.tempo.co/read/ekonomi-dan-bisnis/423325/proyek-relkereta-sulawesi-selatan-lambat>
- Ubaidillah, M. (2022, December 12). *6 manfaat ekonomi kereta api pertama di Sulawesi*. SWA Online. <https://swa.co.id/swa/6-manfaat-ekonomi-kereta-apipertama-di-sulawesi>
- Viegas, J. M. (2010). Questioning the need for full amortization in PPP contracts for transport infrastructure. *Research in Transportation Economics*, 30(1), 139–144. <https://doi.org/10.1016/j.retrec.2010.10.014>
- Wang, H., Xiong, W., Wu, G., & Zhu, D. (2018). Public–private partnership in public administration discipline: A literature review. *Public Management Review*, 20(2), 293–316. <https://doi.org/10.1080/14719037.2017.1313445>

- Wibowo, F. A. (2017). *Meningkatkan kualitas APBN dengan skema KPBU*. Kerja Sama Pemerintah dengan Badan Usaha, Kementerian Keuangan Republik Indonesia. <https://kpbu.kemenkeu.go.id/read/67-208/umum/kajian-opini-publik/meningkatkan-kualitas-apbn-dengan-skema-kpbu>
- Yusuf, L. (2022, February 20). *Proyek kereta api Makassar-Parepare: Perekonomian tumbuh dan meningkat*. Kementerian Keuangan Republik Indonesia. <https://www.djkn.kemenkeu.go.id/kpkn1-makassar/baca-berita/31366/ProyekKereta-Api-Makassar-Parepare-Perekonomian-Tumbuh-dan-Meningkat.html>
- Zhang, X. (2005). Critical success factors for public-private partnerships in infrastructure development. *Journal of Construction Engineering and Management*, 131(1), 3–14. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2005\)131:1\(3\)](https://doi.org/10.1061/(ASCE)0733-9364(2005)131:1(3))