

CHAPTER 1

INTRODUCTION

1.1 Background

As the capital city of Indonesia, and situated on the populous island of Java, DKI Jakarta stands as one of Southeast Asia's most expansive and densely populated urban centers in the world. Based on the Governor Regulation Number 171 of 2007, DKI Jakarta spans an impressive total area of 662.33 square kilometers, encompassing five distinct municipalities: West Jakarta, North Jakarta, South Jakarta, Central Jakarta, and East Jakarta. This vast geographical area, however, met with an equally significant demographic presence. According to data retrieved from the Population and Civil Registration Service, as of 2022, the city was home to a staggering 10,679,951 residents, a figure that includes approximately 4,380 foreign nationals. The confluence of substantial land area and a burgeoning populace results in a remarkable population density for the city, which currently stands at an astonishing 16,882 people per square kilometer. This density, calculated based on the 2020 population projection from the Badan Pusat Statistik (BPS), presents both opportunities and challenges for the metropolis.

The remarkable population density unsurprisingly deals with numerous complications. It gives rise to a myriad of issues that DKI Jakarta residences grapple with on a daily basis. The problems emanating from this high density include infamous traffic jams that choke the city's roadways, a long commuting time and contributing to a

persistent air pollution problem. Additionally, the limited available land for residences fuels high property prices, making housing affordability a pressing concern for many. Challenges in maintaining cleanliness, coupled with elevated crime rates and various other societal issues, add further layers of complexity to the urban tapestry of DKI Jakarta (Dardak, 2006).

Traffic congestion in DKI Jakarta has been a longstanding and deeply entrenched issue, as highlighted by Tirto.id journalist, Wan Ulfa Nur Zuhra (2020). Historical records trace this problem back to the era of President Soekarno's administration, signaling its persistence for over half a century. The enduring nature of Jakarta's traffic is underscored by urban planning measures implemented during the early 1960's particularly in preparation for the 1962 Asian Games.

According to TomTom Traffic Index, By 2023, Jakarta's congestion level was 53%, indicating that a 30-minute trip during free-flow traffic would take approximately 45.9 minutes during peak hours. Historical records from the World Population Review show that traffic in the 1950s and 1960s was chaotic, despite the lower number of vehicles on the road compared to today. The rapid urbanization and motorization of Jakarta since President Soekarno's era have compounded the problem. The city's population has grown from approximately 2.9 million in 1960 to over 11.4 million in 2024.

The ever-increasing population also results in an increase in the number of movements or mobility of society. If there is a bottleneck in traffic which is indicated by

the vehicle not moving then it is called a traffic jam. According to the World Resources Institute (WRI) Indonesia, one of the main causes of traffic congestion in Jakarta is the preference for private vehicles over public transportation. WRI Indonesia notes that public transportation usage remains low, with only 19.8% of Jakarta residents and 20% of suburban residents relying on it, leading to severe congestion in the Greater Jakarta area). There are those who think it is uncomfortable, the travel time is too long, the transportation capacity is not enough, and various other reasons. Apart from that, Jakarta is also intensively building infrastructure, making traffic jams worse. The number of private transport users tends to continue to increase from year to year, which is not supported by adequate infrastructure development (Deloitte Mobility Index, 2020).

With the problems that occurred, the DKI Jakarta Government created a policy to overcome this congestion. The innovation created is new public transportation aimed at the public interest, namely Mass Rapid Transit commonly called MRT. MRT is a public transportation that can transport large masses of people at very high speeds. MRT can be a transportation solution for handling traffic jams in the city of Jakarta. The advantages of the MRT include accommodating many passengers in one trip, not causing air pollution, and punctuality of travel. With such a goal, MRT can be relied on as a solution to the congestion of public transportation (Global Transport Knowledge Partnership, 2010).

The MRT system has emerged as a transformative solution to Jakarta's enduring traffic woes. As the capital city of Indonesia, Jakarta had long grappled with crippling

traffic congestion, a challenge that was not only hampering economic productivity but also diminishing the quality of life for its residents. The introduction of the MRT in Jakarta was driven by worsening traffic congestion, increasing private vehicle use, and inadequate public transport infrastructure (Brotodewo, 2010). Environmental concerns, such as high pollution levels, also pushed for a sustainable transit solution. To add, economic losses due to long commuting times highlighted the need for efficient mobility.

The MRT offers a rapid and efficient mode of public transportation, providing an attractive alternative to private cars. With dedicated tracks and stations strategically located across the city, commuters now have a reliable means of navigating Jakarta's often chaotic road network. This not only reduces the number of vehicles on the road but also curtails the time spent in traffic jams, offering a significant improvement in daily commute times (Kusuma, 2020). The MRT's role in reducing traffic congestion is further underscored by its capacity. The system can accommodate a substantial number of passengers, providing a mass transit solution that can potentially take thousands of cars off the road during peak hours. This shift in travel behavior is instrumental in decongesting Jakarta's main city routes (Suprpto, 2021).

The idea of developing the MRT in Jakarta emerged in 1985 from the concept of BJ Habibie, who was then serving as the Minister of Research and Technology, as well as the head of the Agency for the Assessment and Application of Technology. This idea was later followed up by Sutiyoso during his tenure as the Governor of DKI Jakarta, with an initial concept for the construction of an underground railway system. However,

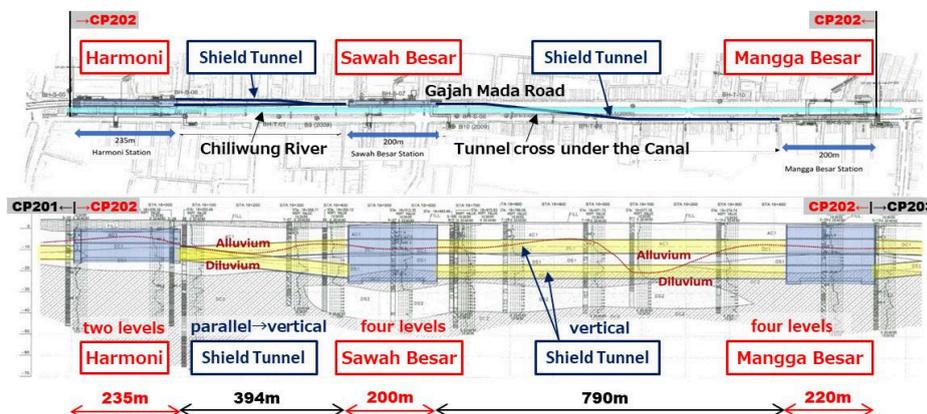
the MRT development did not progress significantly due to the 1998 monetary crisis, which was rooted in weaknesses within the public sector or business (Eri Haryanto, 2020).

In 2005, during Susilo Bambang Yudhoyono's presidency, the MRT was designated as a national project, officially marking its importance for Indonesia's urban development (Siti Nur Azzura, 2020). This designation led to a division of responsibilities between the central and Jakarta provincial governments. However, despite this formal commitment, the project faced various challenges, including financial constraints, land acquisition issues, and bureaucratic hurdles. Progress was slow until Joko Widodo became governor of Jakarta and later assumed the presidency. Under his leadership, the project gained momentum, with a stronger push for execution and international cooperation.

During Jokowi's tenure as governor at 2013, the groundbreaking ceremony for the underground MRT Phase 1 project took place in the Dukuh Atas area, signifying the beginning of tangible construction efforts. The first phase of the MRT, spanning 15.7 km from Lebak Bulus to Bundaran HI, was divided into elevated and underground sections, with support from the Japan International Cooperation Agency (JICA) in terms of funding and technical expertise. The construction process involved complex engineering challenges, including tunneling beneath Jakarta's dense urban landscape. Key stations such as Bundaran HI, Senayan, and Fatmawati were strategically developed to integrate with existing transport systems.

After years of planning and construction, the MRT was completed and officially inaugurated in 2019 during Anies Baswedan's tenure as governor (Tambun, 2020). Its launch marked a historic milestone as Jakarta's first-ever MRT system, designed to alleviate traffic congestion and modernize the city's public transportation network. Since its inauguration, the MRT has played a crucial role in improving urban mobility, though further expansion and integration with other transit modes remain ongoing challenges.

According to PT MRT Jakarta, Phase 2 of the MRT Jakarta began in 2021 and spans 11.8 km from Bundaran HI to Ancol Barat. Designated a national strategic project under Presidential Regulation No. 56 of 2018, it is also guided by Jakarta Governor's Decree No. 1713 of 2019. Phase 2 consists of two stages: Phase 2A (5.8 km) with seven underground stations from Thamrin to Kota and Phase 2B (6 km) with two stations (Mangga Dua, Ancol) and a depot at Ancol Marina, currently in feasibility study. As of December 2024, CP 201 (Thamrin - Monas) is 84.45% complete, CP 202 (Harmoni - Mangga Besar) 43.98%, and CP 203 (Glodok - Kota) 66.23%. Phase 2A is expected to be operational by 2027 and Phase 2B by 2029 (PT MRT Jakarta, 2024).



Picture 1. MRT Jakarta Master Construction Plan

In a similar case to Singapore in 1970, they began minimizing the use of private vehicles due to the limited land available. As a replacement, they started planning the development of the MRT as a sustainable alternative for mobility. Construction of the MRT began in 1987, and by 2020, Singapore had 122 MRT stations (Patel & Padhya, 2021). In the same time frame from 2020 to 2027, Singapore is also constructing Phase 4 of their MRT system, known as the East Coast Line, with a target of seven stations. As of 2024, Singapore Mass Rapid Transit (SMRT) has completed five stations, with only two remaining. These last two stations are expected to be completed by 2025 (Land Transport Authority, 2024). In comparison with Malaysia, the construction of the first phase of the MRT began in 2016, with a total of 12 stations from Sungai Buloh to Semantan. This was followed by the second phase, the Putrajaya Line, which includes 19 stations. Within a span of six years, Malaysia successfully developed two MRT lines with a total of 31 stations Nuranisa Huda Ramlan et al. (2021).

The development of MRT systems in Jakarta, Singapore, and Malaysia demonstrates a shared objective of mitigating urban traffic congestion through sustainable and efficient public transportation. However, while all three cities face the challenge of accommodating growing populations and rising urban mobility demands, Jakarta's MRT development has been particularly challenging due to several factors.

In comparison, Singapore's MRT system, which began development in 1987, serves as an established model for efficient mass transit systems. With 122 stations completed by 2020, Singapore has demonstrated the benefits of early planning and

consistent investment in urban transport. Singapore's success can be attributed to its well-coordinated government policies, efficient land use, and sustained financial commitment. However, even Singapore faced challenges in the early years, particularly in minimizing private car use and managing limited space for infrastructure. These early hurdles have been largely overcome through strategic planning and long-term investment, which are critical elements that Jakarta can learn from as it continues to develop its MRT system.

Malaysia's MRT development, which began in 2016, also shows significant progress. The successful rapid implementation of Malaysia's MRT system can be attributed to clear governance, streamlined decision-making, and robust financial and technical support. While Malaysia has seen faster results, its challenges were not insignificant, including managing land acquisition, funding, and overcoming engineering constraints. Malaysia's ability to execute two MRT lines in a short period offers valuable insights for Jakarta, particularly in streamlining bureaucratic processes and improving governance structures.

Jakarta's MRT development faces substantial challenges compared to the experiences of Singapore and Malaysia. The city's traffic congestion and rapid urban growth necessitate urgent solutions, but the project has been slowed by governance issues, regulatory complexity, and technical difficulties in a densely populated city. According to PT MRT Jakarta, challenges in construction and tunneling are significant due to soft soil and sediment conditions across the city.

However, the lessons learned from Singapore's long-term vision and Malaysia's rapid implementation provide valuable insights into overcoming these challenges. Singapore's Land Transport Authority highlights that the construction of its first rail line began in 1983, following extensive planning and foresight. Jakarta can leverage these lessons to streamline its MRT development, improve coordination between stakeholders, and ensure that its MRT system becomes a viable solution for the city's long-term mobility needs.

Jakarta's MRT development presents unique challenges that stem from governance, regulatory, and technical factors, which directly influence policy implementation and intergovernmental coordination. Effective collaboration between national and local governments is critical to overcoming these challenges, as seen in the experiences of neighboring countries like Singapore and Malaysia (Soh & Yuen, 2020). In Singapore, the Land Transport Authority (LTA) played a pivotal role in aligning national and local policies, ensuring streamlined decision-making and efficient implementation (Tang & Lo, 2019). By comparison, Jakarta's MRT development has faced obstacles such as overlapping regulations, unclear roles among institutions, and fragmented responsibilities, which hinder policy execution (Abubakar & Handayani, 2021).

The policy challenges encountered in Jakarta's MRT system stem from complex land acquisition processes, bureaucratic inefficiencies, and inconsistent regulatory frameworks that require better coordination mechanisms (Rukmana, 2020). Without

strong coordination, delays and budget overruns become inevitable, as witnessed in the first phase of MRT Jakarta's construction (PT MRT Jakarta, 2023). The experience of Malaysia's MRT, which benefited from a centralized approach under the Mass Rapid Transit Corporation (MRT Corp), provides valuable insights into how Indonesia could enhance intergovernmental collaboration to expedite MRT projects (Rahmat & Ismail, 2018).

Therefore, understanding how national and local governments coordinate their efforts is essential in determining the effectiveness of policy implementation for Jakarta's MRT system. This research will examine the extent to which government coordination facilitates or hinders MRT development, while also identifying specific policy challenges that impact the project's progress. By analyzing these factors, the study aims to provide recommendations for improving governance structures and ensuring successful MRT expansion in Jakarta (Firman, 2021).

Challenges refer to obstacles or difficulties that hinder the successful completion of a task, project, or goal, often requiring strategic solutions to overcome (Rukmana, 2020). In the context of public governance, policy challenges specifically involve complexities in the development, formulation, or implementation of public policies, which can arise from regulatory overlaps, bureaucratic inefficiencies, stakeholder conflicts, and coordination issues among government institutions (Abubakar & Handayani, 2021). Addressing these challenges is essential to ensure effective policy

execution and the successful realization of infrastructure projects like Jakarta's MRT system.

1.2 Research Problem

1. How does the coordination between national and local governments affect the policy implementation and development of Jakarta's MRT system?
2. What are the challenges faced due to government policies in Jakarta's MRT system?

1.3 Purpose of the Research

1. This research aims to investigate the key challenges Jakarta's MRT system has faced due to government policies, identifying regulatory hurdles and governance issues. It will highlight areas where policy decisions have either supported or hindered MRT development.
2. The study will analyze the coordination between national and local governments and its impact on the MRT project's execution. It will examine how differing priorities and decision-making processes between these levels of government influence the development of the MRT system.

1.4 Benefit of the Research

1. Theoretical Benefit

- This research contributes to the body of knowledge on public transportation policy, specifically in the context of large-scale urban transit systems like Jakarta's MRT. It will offer insights into how government policies and intergovernmental coordination affect public transportation development in a rapidly growing urban environment.

2. Practical Benefit

- The findings of this research can inform policymakers and local authorities in Jakarta and other cities with similar urban challenges, helping them improve policy formulation and decision-making processes. It will also provide recommendations for addressing policy-related obstacles, enhancing the overall effectiveness and efficiency of the MRT system.

1.5 Literature Review

Policy challenges arise when structural and procedural obstacles hinder the development, execution, and evaluation of public policies. Dunn (2018) emphasizes that these challenges are often caused by conflicts among stakeholders, overlapping regulations, and limited institutional capacities. In the context of public governance, policy challenges are particularly prevalent in complex infrastructure projects where decision-making involves multiple actors and competing interests. Land acquisition disputes, legal ambiguities, and unclear jurisdictional boundaries are common examples that delay project timelines and inflate costs.

Governance in infrastructure projects often demands high levels of inter-institutional collaboration and regulatory clarity. Grindle (2004) argues that successful policy outcomes are more achievable when government institutions adopt clear coordination mechanisms and collaborative decision-making processes. Such mechanisms ensure that roles and responsibilities among government agencies are defined and aligned with project objectives. Without these processes, fragmented governance and institutional conflicts can create inefficiencies, resulting in project delays and resource mismanagement.

Moreover, Grindle (2004) highlights that governance frameworks should prioritize stakeholder engagement and adapt to evolving policy contexts. Participatory governance, where local communities and stakeholders are actively involved in the decision-making process, increases the legitimacy and effectiveness of policies. In contrast, top-down approaches may alienate key stakeholders and face resistance during the implementation phase. Hence, creating adaptive governance models that are inclusive and transparent is essential to overcoming policy challenges.

Policy implementation challenges arise when translating policy goals and strategies into actionable outcomes. Mazmanian and Sabatier (1983) identify key factors that influence the success of policy implementation, including the clarity of policy directives, resource availability, and effective intergovernmental coordination. In infrastructure projects, such as Jakarta's MRT development, unclear policy goals and fragmented institutional responsibilities often hinder smooth implementation. Effective

coordination mechanisms are essential to mitigate these challenges and ensure timely project delivery.

Bureaucratic inefficiencies are another significant challenge that hampers policy implementation. Abubakar and Handayani (2021) highlight Jakarta's MRT as an example where overlapping regulations and unclear institutional roles led to delays and budget overruns. The project faced complications in land acquisition processes, which required extensive negotiations and legal procedures. These bureaucratic bottlenecks underscore the need for streamlined regulations and a more cohesive institutional framework to facilitate policy execution.

Furthermore, effective intergovernmental partnerships play a crucial role in overcoming implementation challenges. Abubakar and Handayani (2021) argue that collaboration between national and local governments can reduce administrative hurdles and foster a shared vision for project success. Jakarta's MRT project illustrates the importance of such partnerships, as conflicting priorities and fragmented responsibilities have often impeded progress. Addressing these challenges requires a clear delineation of roles and responsibilities, as well as improved communication and cooperation among stakeholders.

Urban congestion has become a major challenge for many cities worldwide, and Jakarta, Indonesia is no exception. With a rapidly growing population and limited urban planning, Jakarta has long struggled with traffic gridlock, environmental pollution, and inefficiencies in transportation systems. In response to this issue, the city has turned to

the development of Mass Rapid Transit (MRT) as a potential solution to alleviate congestion. The implementation of the MRT Jakarta is a key part of the city's broader strategy to reduce dependence on private vehicles, encourage public transport use, and tackle air pollution. However, the effectiveness of MRT systems in reducing congestion remains a subject of interest, with the studies from around the world providing mixed results depending on the extent and integration of the networks.

According to Widita et al. (2023), numerous cities with well-developed MRT systems, such as Tokyo and Seoul have demonstrated the positive impact of mass transit on reducing traffic congestion. These cities have successfully integrated MRT systems with other modes of transport, making public transport a viable and efficient alternative to private cars. The success stories of these cities have inspired urban planners in Jakarta to adopt a similar approach. However, the impact of MRT Jakarta, while promising, has been somewhat limited in scope and largely confined to the areas directly served by the system. Research conducted by Widita et al. (2023), titled "Impact of the MRT Jakarta on Congestion: Evidence from a Before-After, Treatment-Control Evaluation," shows that while the system has indeed contributed to reducing congestion in specific corridors, the overall effect on Jakarta's traffic congestion has been modest. This is largely due to the limited coverage of the MRT system, which currently serves only a small portion of the city.

The study highlights that the reduction in congestion is primarily observed in areas directly along the MRT corridor, where there is a noticeable decrease in traffic volume. The authors employed a before-after treatment-control evaluation approach,

comparing traffic conditions in areas served by the MRT to those in control corridors that are not served by the system. The results show that while congestion has slightly improved in the treatment areas, the effect has been relatively short-term and localized. One of the key findings is that many commuters still rely on private vehicles or other forms of transport, given the limited reach of the MRT network. As such, the system's impact on overall congestion in the city remains constrained.

The findings from Jakarta's MRT experience are consistent with global trends observed in other cities where mass transit systems have been introduced. Studies suggest that the network depends on its integration with other forms of public transport, such as buses, and the extent to which it provides a convenient and efficient alternative to driving. In Jakarta, the limited network coverage of the MRT has made it difficult for the system to address the broader issue of traffic congestion across the entire city. For the MRT to have a more significant impact, further expansion of the network is essential, particularly in areas that are currently underserved. Additionally, improving the integration of the MRT with other transport systems, such as buses and commuter trains, is crucial to making public transportation a more attractive option for Jakarta's residents.

To conclude, while the introduction of the MRT system in Jakarta represents a step forward in addressing the city's traffic congestion, its current impact has been modest and localized. The limited coverage and the continued reliance on private vehicles for daily commutes suggest that Jakarta's congestion problems remain far from solved. For The MRT to effectively reduce congestion on a larger scale, expanding the

network, improving its integration with other transportation systems, and encouraging greater public adoption will be necessary. These steps will be crucial in ensuring that the MRT fulfills its potential as a key component of Jakarta's transportation infrastructure, ultimately contributing to a more sustainable and efficient urban mobility system.

The MRT Jakarta, particularly along the North-South corridor, was expected to offer a more efficient and sustainable alternative to the city's heavily congested roads. The system, which became operational in 2019, has shown initial success in alleviating congestion in the areas directly served by the MRT. Early evaluations have highlighted that the MRT provides a convenient, affordable, and faster way for commuters to navigate the city, especially along the Dukuh Atas station area. However, while the MRT has reduced congestion locally, its broader impact on the overall traffic conditions of Jakarta has been less significant. This is largely due to the system's limited coverage, which only serves specific parts of the city, leaving much of Jakarta still reliant on private vehicles or other forms of public transport.

The study by Malina Dianathul D.A (2023) highlights that the MRT's initial success in alleviating traffic congestion is confined mainly to the corridors it directly serves. This finding mirrors trends observed in other cities worldwide, where MRT systems provide an effective solution to congestion in areas with sufficient coverage. However, for the MRT Jakarta to significantly reduce traffic congestion across the entire city, the network needs to be expanded. The current network is not enough to serve the growing population and the widespread traffic problems that Jakarta faces. Challenges

such as the COVID-19 pandemic hindered the full utilization of the MRT system, reducing ridership and limiting its ability to effectively combat congestion.

One of the critical issues identified in the study is the limited integration of the MRT with other forms of public transportation, such as buses and commuter trains. While efforts have been made to improve connectivity such as the integration of MRT Jakarta with the TransJakarta bus rapid transit (BRT) system and the commuter rail (KRL) challenges remain in creating a seamless transportation network. The introduction of the JakLingko system, which aims to unify ticketing and fare payment across different modes of transport, represents a step forward in fostering integration. However, physical connectivity at transfer points and ease of interchange between modes still require improvement. In cities like Tokyo and Seoul, where MRT systems are deeply integrated with other public transport options, significant reductions in congestion have been achieved. Jakarta can learn from these models by ensuring better intermodal connections and enhancing last-mile solutions to encourage higher MRT usage.

In conclusion, while the MRT Jakarta represents a promising step toward addressing the city's traffic congestion, its current impact has been limited by the network's coverage and the continued reliance on private vehicles. Despite efforts to integrate the MRT with existing public transport networks, challenges in seamless connectivity persist. To achieve the intended results of reducing congestion on a broader scale, further investments in expanding the MRT network and improving its integration

with other transportation systems are essential. This will allow Jakarta to better manage its traffic problems and provide a more sustainable and efficient transportation system for its residents.

Jakarta rapid urbanization, coupled with an increasing population and number of vehicles on the road, has exceeded the traffic situation. According to the study by Aryanto Nur et al. (2024), Jakarta has seen its vehicle numbers soar to 26.4 million, while the road infrastructure has not kept pace, with only 6,653 kilometers of roads. This discrepancy between the number of vehicles and road capacity leads to significant congestion, which causes longer travel times and impacts the city's productivity and economic efficiency.

The study emphasizes that improving public transport services is crucial for reducing congestion in Jakarta. Public transportation offers an alternative to private vehicles, reducing the overall number of cars on the road, which directly impacts congestion levels. However, while there have been efforts by the government to improve Jakarta's public transport infrastructure, including the introduction of the MRT system, the study notes that these efforts have not yet fully addressed the scale of the congestion problem. Effective traffic management and increased public awareness of the benefits of using public transportation are also essential components in solving this issue.

The study further highlights that the city's traffic problems are not just an inconvenience but also have significant economic and environmental impacts. The

longer travel times during peak hours and the economic losses resulting from decreased productivity contribute to Jakarta's overall inefficiency. Additionally, increased vehicle emissions exacerbate the city's air pollution problems, which further degrade the quality of life for its residents. The authors argue that solving the congestion issue requires a multifaceted approach, combining improvements in public transportation, traffic management, and the active involvement of the public in reducing car dependence.

The authors call for a comprehensive approach to tackling Jakarta's traffic congestion. This includes enhancing public transport infrastructure, promoting its use among residents, and implementing more effective traffic management strategies. As Jakarta continues to grow, public transportation will play a vital role in ensuring sustainable urban mobility and addressing the challenges posed by traffic congestion.

According to Febriani et al. (2020), the success of the MRT in alleviating traffic congestion is contingent upon a successful modal shift, where commuters transition from using private vehicles to adopting public transportation. The authors argue that encouraging such a modal shift requires improvements in the MRT's service offerings, including factors like speed, comfort, affordability, and convenience, which could make the MRT more attractive compared to private car usage.

The study by Febriani et al. (2020) emphasizes the importance of understanding commuter behavior in driving this shift. Their research, which surveyed Jakarta residents, revealed that a substantial number of respondents expressed willingness to use the MRT, provided it offers key advantages over private vehicles. These advantages

included a faster commute, a more comfortable and safer travel experience, and the elimination of traffic jams. These findings align with previous research, which suggests that public transport systems can become a viable alternative to private cars when they offer competitive benefits such as time savings and comfort (Cervero, 2005).

However, the study also identified several challenges that could hinder the successful modal shift in Jakarta. For instance, the authors noted that the effectiveness of the MRT system in reducing traffic congestion would be closely tied to its integration with other modes of public transport, such as buses and commuter trains. This integrated system would provide a seamless travel experience for commuters, facilitating easier transfers between different modes of transportation. Inadequate integration could lead to inefficiencies and dissuade potential users from switching to public transport (Givoni & Rietveld, 2014).

Febriani et al. (2020) advocate for a comprehensive approach to promoting public transportation usage in Jakarta. Beyond improving the MRT's core attributes, such as speed and reliability, policymakers must ensure that the MRT system is integrated effectively with other forms of public transport and that commuters have access to well-designed station facilities. This holistic approach would make the MRT a more compelling alternative to private vehicles, leading to a reduction in traffic congestion and contributing to the sustainability of Jakarta's urban transport system.

The effectiveness of public transportation systems, such as Jakarta's Mass Rapid Transit (MRT), relies heavily on seamless integration from the beginning to the end of a

journey. The first and last mile segments, which refer to the distance between a user's starting point and the nearest public transport station (first mile), and between the station and the final destination (last mile), are crucial for ensuring convenience and encouraging the use of public transit. Purba and Widiyastuti (2024) examine users' perceived quality of the Jakarta MRT system, particularly focusing on these first and last mile experiences. Their study sheds light on the challenges commuters face when accessing and departing from MRT stations and underscores how these segments can influence the overall success of the MRT system.

The authors identify several factors that affect the perceived quality of the first and last mile segments, including accessibility, safety, comfort, and convenience. They found that a lack of easy access to MRT stations, especially for those coming from distant or poorly connected areas, limits the system's potential to reduce car dependency. Issues such as the absence of direct pedestrian paths, inadequate transport connections, and poorly maintained facilities were noted as barriers to a smooth commute. Furthermore, the safety of these segments, especially in terms of lighting, security, and road conditions, plays a significant role in commuters' willingness to use public transport. If the first and last mile segments are not user-friendly, passengers may resort to private vehicles, negating the environmental and congestion-reduction benefits that public transport aims to provide.

The study highlights that improving the first and last mile infrastructure could lead to a more positive perception of the MRT system, encouraging more people to shift

from private cars to public transit. The authors suggest that investments in pedestrian-friendly infrastructure, better integration with feeder buses, and improved accessibility for people with disabilities could enhance users' overall travel experience. They also emphasize the importance of safety measures, such as surveillance systems and better lighting, to foster a sense of security. According to Purba and Widiyastuti (2024), these improvements are not only essential for boosting MRT ridership but are also crucial for achieving sustainable urban mobility goals in Jakarta.

In conclusion, the research by Purba and Widiyastuti (2024) underscores the importance of the first and last mile segments in shaping the overall effectiveness of the MRT system in Jakarta. The study advocates for comprehensive planning and development of infrastructure that addresses these segments in order to enhance public transportation's appeal. By making these segments safer, more accessible, and better connected, Jakarta's MRT system can become a more viable alternative to private car usage, thus contributing to the reduction of traffic congestion and the promotion of sustainable urban transport.

Firda (2021) studies the DKI Jakarta Provincial Government's endeavor to mitigate traffic congestion through the implementation of the MRT (Mass Rapid Transit) program. Firda's research unveils a striking disparity between the planned and actual effectiveness of this program. While the government initially set a target of 75,000 daily passengers, PT MRT Jakarta exceeded expectations, accommodating a

remarkable 79,000 daily riders. This success prompts essential questions about the factors driving this achievement and its broader implications.

Beyond ridership numbers, the program's awareness and socialization efforts also garnered commendable success. Nevertheless, the overarching objectives of the MRT program remain unfulfilled due to various user-related shortcomings. Firda's research illuminates the multifaceted dynamics surrounding the MRT program in Jakarta, where achievements in certain aspects coexist with persistent challenges in achieving its core objectives. This study serves as a foundational reference for exploring the intricacies of the MRT program and its impact on alleviating Jakarta's

The literature review incorporates an essential source, "Implementation of Public Transport Policy in DKI Jakarta," authored by Sabrina and colleagues in 2021. This scholarly work offers a significant basis for understanding the trajectory of public transport policy in DKI Jakarta, unveiling pivotal insights into the government's endeavors to enhance the city's transportation landscape.

Sabrina et al. (2021) research delves into the various policy measures that have been implemented by the government to optimize public transport and address the pressing issue of traffic congestion. These measures include the introduction of an odd-even system, which regulates private vehicle usage on specific days, thereby mitigating the strain on road infrastructure. The prohibition of motorbike usage on certain roads further reflects the government's proactive stance in managing traffic flow.

In addition, the adoption of an electronic road pricing system stands as a testament to their commitment to optimizing road usage efficiently.

Notably, the research emphasizes the government's extensive efforts to elevate public transportation facilities in DKI Jakarta through substantial development initiatives. This multi-pronged approach aims to provide the public with more accessible and sustainable alternatives to personal vehicles, thus promoting a more efficient urban transport ecosystem.

The findings derived from Sabrina and her team's research provide a crucial foundation for the ongoing study. They illuminate the multifaceted strategies the government has employed to improve public transport and alleviate traffic congestion in Jakarta. These insights enrich the discourse on urban planning and transportation management within the city, offering valuable context for the current investigation.

Fikri et al.'s study titled "Reputation of the Quality Portrait Satisfaction of Jakarta's Integrated Mass Rapid Transit (MRT) Implies Community Sustainability" (2023) delves into the pressing issue of road congestion caused by private vehicles in Jakarta, Indonesia. Recognizing the urgency of the situation, the government has implemented preventive and curative measures to alleviate the burden of traffic congestion. One of the key strategies employed has been the development of public transportation systems aimed at reducing reliance on private vehicles. This shift towards sustainable transportation alternatives underscores the need for effective integration of

the community, supported by high-quality infrastructure and transportation modes that offer flexibility without exacerbating existing road congestion.

Central to the government's efforts in addressing Jakarta's traffic congestion is the implementation of the Mass Rapid Transit (MRT) system. This public transportation initiative not only aims to provide an efficient means of commuting but also emphasizes the importance of sustainable urban development. By offering an alternative to private vehicles, the MRT seeks to integrate the community and facilitate access to desired destinations. Notably, the underground infrastructure and superior quality facilities associated with the MRT have contributed to its positive reputation among the public, highlighting its efficacy in addressing the challenges of urban mobility in Jakarta.

The success of Jakarta's MRT system lies not only in its ability to alleviate traffic congestion but also in its broader implications for community sustainability. By reducing reliance on private vehicles, the MRT promotes environmental conservation and mitigates the adverse effects of air pollution and greenhouse gas emissions. Moreover, the integration of the MRT with other modes of public transportation enhances accessibility and connectivity within the city, fostering social inclusion and economic development. Overall, Fikri et al.'s study underscores the significance of public transportation initiatives like the MRT in promoting community sustainability and addressing the complex challenges of urbanization in rapidly growing cities like Jakarta.

The study titled "Analysis of Service Quality, Price Perceptions, and MRT Customer Facilities on Customer Satisfaction" by Keisha et al. (2023) delves into the factors influencing passenger satisfaction with the Jakarta Integrated Moda Raya Train (MRT). As a relatively new transportation option inaugurated in March 2019, the MRT system in Jakarta faced initial challenges, particularly regarding ease of transactions and perceived customer value. Passenger satisfaction was gauged based on perceptions of transaction ease, customer value, punctuality, facility completeness, price suitability, departure schedule adherence, and overall function and facility satisfaction.

One of the key areas explored in the study is the role of service quality in influencing passenger satisfaction with the MRT. Service quality encompasses various aspects, including the quality of station facilities, train units, timeliness of departure, and overall experience during the journey. The findings suggest that service quality plays a crucial role in determining passenger satisfaction, with respondents indicating a high level of satisfaction with the security and comfort provided by the MRT operator.

Furthermore, the study examines how perceptions of price and facilities contribute to passenger satisfaction. Customers evaluate the value proposition of the MRT based on the perceived benefits relative to the costs incurred. Additionally, the quality and adequacy of facilities, such as station amenities and train units, are assessed in terms of their impact on overall satisfaction. The results indicate that most respondents perceive the MRT's fare structure as appropriate and express satisfaction with the quality of facilities provided.

To conclude, the findings of the study underscore the importance of integrating service quality, price perceptions, and customer facilities to enhance passenger satisfaction with the MRT. By understanding and addressing these factors, transportation operators can optimize the overall passenger experience and foster positive perceptions of public transportation. Moreover, the study highlights the need for continuous improvement and investment in infrastructure and service delivery to meet the evolving needs and expectations of commuters in urban environments like Jakarta.

1.6 Theoretical Framework

1.6.1 Good Governance

Good governance is a crucial framework for understanding the policy implementation challenges faced in the development of Jakarta's MRT system. According to the United Nations Development Programme (UNDP), good governance encompasses eight core principles: participation, rule of law, transparency, responsiveness, consensus orientation, equity and inclusiveness, effectiveness and efficiency, and accountability (UNDP, 1997). These principles provide a foundation for ensuring that infrastructure projects, such as the MRT, are planned and implemented in a manner that serves the public interest while minimizing corruption, inefficiencies, and mismanagement (World Bank, 2007). Applying these principles to the MRT Jakarta development helps to evaluate how well government institutions coordinate and deliver

on their responsibilities, particularly in balancing national and local government interests.

The implementation of MRT Jakarta's development policies highlights the significance of effective coordination between national and local governments. Coordination plays a critical role in policy implementation, as it ensures that the responsibilities of various stakeholders align with overarching national development goals (Peters & Pierre, 2016). The absence of clear coordination can lead to overlapping responsibilities, bureaucratic delays, and inefficient resource allocation, which have historically plagued large infrastructure projects in Indonesia (Dwiyanto, 2011). The MRT project is a strategic national initiative that requires significant collaboration across multiple levels of government (MRT Jakarta Annual Report, 2020). Ensuring coherence and synergy between these entities is essential to meeting project deadlines, managing budget constraints, and addressing public concerns about urban mobility.

Transparency and accountability are also fundamental aspects of good governance in public transportation infrastructure. Transparent governance ensures that information regarding project financing, timelines, and decision-making processes is accessible to the public and stakeholders (OECD, 2015). In the context of MRT Jakarta, transparency is crucial in addressing public skepticism regarding budget allocation, land acquisition processes, and construction delays (Amri & Hudalah, 2020). Furthermore, accountability mechanisms, such as public audits and stakeholder consultations, help ensure that policymakers and contractors are held responsible for their commitments

and that corrective actions are taken when challenges arise (Bovens, 2007). Without robust accountability measures, the MRT project risks falling into the common pitfalls of cost overruns, project delays, and mismanagement.

Public participation is another critical aspect of good governance that influences the success of the MRT Jakarta project. According to Arnstein's (1969) "Ladder of Citizen Participation," meaningful engagement with the public allows for greater responsiveness to community needs and fosters trust between the government and citizens. In Jakarta, public input is essential in addressing concerns related to station accessibility, fare pricing, and potential displacement of local communities due to land acquisition (Ismiyati et al., 2021). However, challenges remain in ensuring that participatory mechanisms are not merely symbolic but are genuinely integrated into decision-making processes (Carino, 2000).

Legal and regulatory frameworks provide the backbone for successful MRT policy implementation. The MRT Jakarta project is governed by several regulations, including Presidential Regulation No. 98/2015 on Public-Private Partnerships (PPPs) and Jakarta Governor Decree No. 1728/2018 on land acquisition for Phase 2 (Ministry of Transportation, 2019). These regulations aim to create a clear policy environment, but their implementation is often hindered by overlapping jurisdictions and legal ambiguities (Patunru & Resosudarmo, 2019). Strengthening regulatory clarity and streamlining processes can help mitigate delays and improve the overall efficiency of MRT development.

In conclusion, applying the principles of good governance to the development of Jakarta's MRT system allows for a comprehensive evaluation of the project's challenges and potential solutions. Ensuring transparency, accountability, coordination, and public participation are key to overcoming policy-related obstacles and achieving sustainable urban mobility goals. The success of Jakarta's MRT hinges not only on technical and financial aspects but also on the ability of government institutions to adopt and adhere to governance best practices (World Bank, 2021).

1.6.2 Government Partnership

In examining the coordination between national and local governments, the Government Partnership Theory provides a valuable framework for understanding the collaborative dynamics required to effectively implement large-scale public projects like the MRT system in Jakarta. At its core, this theory emphasizes the need for alignment in policies and objectives between different levels of government, which ensures smoother implementation and the achievement of shared goals (Carmichael & Tomlinson, 2012). According to the theory, the success of public projects often hinges on the mutual understanding and cooperative efforts of both the central and local governments, as they must navigate the complexities of policy integration and resource allocation (Hodge & Greve, 2007).

One key aspect of government partnership is the alignment of goals, which enables both levels of government to work towards common objectives in a coordinated manner (Grimsey & Lewis, 2004). In the case of Jakarta's MRT development, this

coordination ensures that the national policy objectives for improving urban mobility and infrastructure are translated into practical, localized actions that can address the unique challenges of Jakarta's urban landscape. A failure to align these goals can lead to fragmented planning and execution, resulting in delays, budget overruns, and ineffective outcomes (Amin et al., 2022).

Furthermore, effective government partnership requires clear communication and shared decision-making authority to avoid conflicts and bottlenecks in the policy implementation process. Studies have shown that where national and local governments fail to coordinate effectively, it can lead to power struggles, inefficiencies, and a lack of accountability in delivering public services (Flyvbjerg, 2014). In Jakarta's case, strong partnerships between the national and local governments are essential for overcoming these challenges and ensuring that the MRT system is developed on time and within budget.

Additionally, coordination at the governmental level also plays a crucial role in managing resources, as both national and local authorities must allocate funds and other critical assets to different phases of the MRT development project (IMF, 2015). This requires transparent financial planning and close collaboration to ensure that resources are used effectively and that the project remains financially viable throughout its various stages. Proper resource allocation, facilitated by a well-established government partnership, allows for better management of risks and improves the chances of successful implementation.

In conclusion, the Government Partnership Theory highlights the critical importance of aligning national and local government efforts to ensure the effective delivery of complex public projects like the MRT. In the context of Jakarta, aligning the objectives, strategies, and resources of both the central and regional governments is key to overcoming the policy implementation challenges that arise during the development of large-scale infrastructure projects.

1.6.3 Policy Implementation

Policy implementation theory focuses on the process of transforming policy decisions into effective actions that meet desired outcomes. In the context of Jakarta's MRT system, this theory helps analyze the challenges encountered in turning planning and regulatory decisions into a functional mass transit system. According to Pressman and Wildavsky (1973), effective policy implementation requires clear objectives, coordination among stakeholders, and an understanding of the political, economic, and organizational factors that may hinder or enable success. Jakarta's MRT development, as a high-profile infrastructure project, highlights these complexities, where multiple levels of government, from national authorities to local agencies, need to align their goals and resources to achieve the overarching policy outcomes (Peters, 2018).

A key challenge in the policy implementation of Jakarta's MRT system is the lack of seamless coordination among the various stakeholders involved. As policy implementation theory suggests, collaboration among national, provincial, and local government entities is vital for effective policy realization (Sabatier & Mazmanian,

1980). The absence of well-coordinated action has led to bureaucratic delays, contradictory regulations, and inefficiencies in resource allocation (Dwiyanto, 2011). These issues are evident in the Jakarta MRT project, where there have been overlapping responsibilities between the Ministry of Transportation, the Jakarta Provincial Government, and various private sector stakeholders, delaying decisions on land acquisition, financing, and construction processes (MRT Jakarta Annual Report, 2020).

Additionally, according to Elmore (1979), the implementation process is also influenced by the street-level bureaucrats—individuals who are tasked with putting policy into action. In Jakarta’s case, this includes local government officials and contractors responsible for construction and public engagement. Their interactions with the public, especially with commuters, are crucial in ensuring that the project meets the needs of the community, such as minimizing disruptions during construction and addressing concerns about fare pricing, accessibility, and environmental impact (Amri & Hudalah, 2020). Thus, the practical execution of policy depends on the bureaucrats’ capabilities, knowledge, and commitment to the policy goals.

Furthermore, policy implementation theory also emphasizes the importance of feedback mechanisms to address unforeseen challenges. Feedback loops in Jakarta’s MRT project, including public consultations and evaluations, are essential for adapting the policy to emerging issues (Bovens, 2007). For instance, feedback from the public regarding the location of stations or potential displacement due to land acquisition can shape the course of the project, preventing long-term dissatisfaction and fostering

greater public acceptance (Ismiyati et al., 2021). Without such mechanisms, the MRT system could face resistance, leading to delays and even the failure of the policy's long-term goals.

The alignment of government policies with implementation strategies is a crucial aspect of successful policy realization. In Jakarta, the national government's policy of promoting mass transit as a solution to traffic congestion must align with the local government's specific needs and challenges in urban mobility (Sutrisno, 2019). The application of policy implementation theory underscores the importance of harmonizing these policies to prevent inconsistencies in their execution. As Jakarta's MRT system moves forward, ensuring that national and local governments remain aligned will be pivotal to overcoming the challenges of policy implementation, enabling the project to meet its goals and serve the public effectively.

In conclusion, the application of policy implementation theory to the Jakarta MRT project reveals that effective policy execution requires coordinated efforts, strong bureaucratic leadership, responsive feedback mechanisms, and alignment between national and local policy objectives. These elements must be addressed to overcome the various challenges in policy implementation and ensure that the MRT system can deliver on its promises of improved urban mobility and sustainable transport solutions for Jakarta.

1.7 Operationalization Concept

1.7.1 Coordination

Coordination refers to the structured efforts among various actors to align strategies, share resources, and streamline actions to achieve a common objective. In the context of Jakarta's MRT system, coordination is essential for ensuring that multiple stakeholders including national and local governments, transport authorities, construction firms, and international partners effectively collaborate throughout the project's planning, implementation, and operational phases.

A well-coordinated approach minimizes inefficiencies, prevents duplication of efforts, and ensures that different agencies work toward a unified vision for urban mobility. The success of MRT Jakarta depends on how different government institutions coordinate responsibilities, particularly in addressing financial challenges, land acquisition, regulatory approvals, and technical integration with other public transportation systems. For instance, coordination between the central government and the Jakarta provincial government determines funding distribution, while cooperation with agencies like TransJakarta and KRL Commuter Line influences seamless multimodal transport integration.

Coordination mechanisms such as joint planning meetings, intergovernmental agreements, and regulatory frameworks play a crucial role in ensuring that MRT policies align with broader urban development goals. The effectiveness of coordination can be assessed through factors like communication efficiency, clarity of role

distribution, and conflict resolution strategies among institutions involved in MRT Jakarta.

By analyzing Jakarta's MRT project through the lens of coordination, this study evaluates how well government institutions and other relevant actors have worked together to overcome obstacles in infrastructure development, policy implementation, and transport system integration. Weak coordination could lead to project delays, budget overruns, and operational inefficiencies, whereas strong coordination enhances the overall success and sustainability of the MRT system.

1.7.2 Government Partnership

Government partnership refers to the collaboration between different levels of government, including local, regional, and national authorities, to achieve common objectives, such as the successful implementation of infrastructure projects. In the context of Jakarta's MRT, this partnership involves coordinated efforts between the national government, which typically provides funding and strategic guidance, and local government, which ensures the project's relevance to local needs and its alignment with urban development plans. This theory emphasizes how these collaborations help overcome challenges in policy execution and resource allocation, particularly for large-scale urban mobility projects like the MRT. The operationalization of government partnership in this study will focus on evaluating the mechanisms of cooperation across different levels of government, how they share responsibilities, and how this collaboration influences the decision-making and delivery of the MRT project. By

assessing the effectiveness of these partnerships, the study will explore whether such intergovernmental collaborations have facilitated smoother implementation and better integration of the MRT system within Jakarta's overall transportation strategy.

1.7.3 Policy Implementation

Policy implementation refers to the process by which government policies are translated into actions and outcomes through specific programs, projects, and activities. In the context of Jakarta's MRT, this theory examines how the policies related to urban transport are executed and the challenges encountered in their implementation. Successful policy implementation is influenced by various factors, including the clarity of the policy goals, the allocation of resources, coordination among implementing agencies, and the capacity of local governments to execute the plans effectively. This operationalization of policy implementation in the study will focus on how the policy decisions regarding Jakarta's MRT system are implemented in practice, identifying obstacles such as delays, coordination issues, or resistance from local stakeholders. Key indicators will include the consistency of policy enforcement, the allocation of financial resources, and the role of different government bodies in monitoring and executing the MRT project. By examining these factors, the study will assess whether the policy implementation process has been smooth or hindered by administrative or logistical challenges. Additionally, the theory will help to understand how the policy decisions taken by the central government are adapted and applied at the local level to ensure the MRT's successful realization.

1.8 Methodology

1.8.1 Research Method

Qualitative research is a method that focuses on understanding and interpreting phenomena through descriptive data in the form of written or spoken words, or through observing behavior (Creswell, 2014). This method seeks to explore the deeper meanings, experiences, and perspectives of individuals or groups involved in a particular event or subject. In the case of studying the policy implementation challenges of the second phase of Jakarta's MRT, a qualitative approach will provide rich, detailed insights into the complexities of the project.

Descriptive research, a subtype of qualitative research, involves systematically collecting and analyzing data to create an accurate picture of the research subject or object (Babbie, 2010). By using qualitative methods, this research can examine how the Jakarta MRT policy is perceived by various stakeholders, such as government officials, MRT users, urban planners, and community members, in relation to the social and traffic impacts of the MRT. This approach allows for an in-depth understanding of the subject matter through the words and experiences shared by the participants (Patton, 2015).

Qualitative methods are particularly effective in capturing the nuances of human experiences and feelings, making it an ideal choice for this research (Denzin & Lincoln, 2011). For example, qualitative data can provide insight into how local residents perceive changes in traffic patterns due to the MRT, how users feel about the

improvements in public transport, and how different social groups respond to these changes. Through semi-structured interviews, focus groups, and participant observations, the researcher can gather detailed, context-specific information that may not be captured in quantitative research (Rubin & Rubin, 2012).

Moreover, qualitative research allows for an exploratory approach to complex issues where little is known about the subject. In the case of Jakarta's MRT, qualitative methods will provide a platform for participants to share their personal experiences and stories, leading to a deeper understanding of how the policy impacts different social groups and the challenges involved in its implementation (Merriam, 2009). This open-ended inquiry is valuable when attempting to gain insights into the social, cultural, and political dimensions of transportation projects and urban development (Stake, 1995).

By focusing on qualitative methods, this research can provide a nuanced, human-centered analysis of the Jakarta MRT policy's effects, offering practical insights into the lived experiences of those involved or impacted by the project. This is crucial for identifying areas of improvement and enhancing future transportation policies in Jakarta.

1.8.2 Research Subject

The research subjects in this study play a crucial role in providing data relevant to the implementation of the MRT Jakarta project. The key informants for this research include:

1. **National Development Planning Agency (Bappenas)** – Specifically, the Coordinator for Land Transport and Railways Sector. This division oversees the planning and financing aspects of the MRT Jakarta, particularly ensuring that the master plan, financial structuring, and feasibility studies align with national development objectives. Their role is crucial in integrating Jakarta’s MRT into broader urban mobility strategies.
2. **Ministry of Transportation** – Represented by the Head of Design and Development / Junior Policy Analyst at BPTJ (Greater Jakarta Transportation Authority). This institution is responsible for formulating construction plans, supervising infrastructure development, and ensuring technical compliance with national transportation policies. The ministry also plays a role in intergovernmental coordination, particularly in financing agreements and infrastructure integration.
3. **PT MRT Jakarta** – Specifically, the Head of Corporate Government and International Affairs. As the primary operator of the MRT system, this entity oversees project implementation, operations, and public engagement. Their role involves managing partnerships with government institutions, ensuring operational efficiency, and addressing policy and regulatory challenges.

These institutions collectively shape the development and implementation of the MRT Jakarta system, each contributing to different aspects of policy execution, financing, and project coordination.

1.8.3 Sources of Data

Data sources are all information obtained from respondents or originating from documents for the research in question. There are two types of data analyzed, namely primary data and secondary data.

a. Primary data

Primary data is data collected directly from the research object, namely researchers who go directly to the field to conduct interviews. In this research, primary data was obtained from interviews with related officials to gather data regarding their role in planning and overseeing large-scale infrastructure projects like the Jakarta MRT, including the government's goals, policies, and challenges.

b. Secondary data

Secondary data is a source of data or information taken with the help of various materials contained in the literature. This data can be obtained from existing sources, such as reports, studies, and official documents, rather than directly from primary sources. In this research, the secondary data can be gathered from Government reports or operational data from PT MRT Jakarta.

1.8.4 Data Collection Technique

In collecting data, several techniques are needed, namely:

a. Interview

In obtaining data for this research, interviews will be conducted with relevant agencies who will provide information as answers to this research question. Interviews with officials from the National Development Planning Agency (Bappenas), The Ministry of Transport, and PT MRT Jakarta will help understand the governance practices, policy implementation, and collaboration between different levels of government in the MRT project.

b. Literature Studies

This research will utilize existing reports, documents, and publications related to the Jakarta MRT project. Relevant data will be gathered from official sources such as PT MRT Jakarta's operational reports, documents from Bappenas, and publications from the Provincial Government of Jakarta. Additionally, research papers and studies from academic and government institutions will be reviewed to understand the broader context of urban mobility projects and their policy implications. This secondary data will complement the primary data and help provide a comprehensive understanding of the Jakarta MRT project's implementation and governance.

1.8.5 Data Analysis

The next step is to process the data by analyzing the collected data. Systematically, data analysis techniques provide researchers with ease in drawing conclusions from the data (Pradita, 2013). The classification of these data analysis techniques consists of three parts:

a. Data Reduction

Data reduction is a form of data analysis technique used to verify the related data. In the data reduction stage, the collected data is then simplified according to the observations made in the field. This stage is carried out continuously throughout the research until the final report is prepared.

b. Data Presentation

Data presentation is the process of organizing and compiling data in a structured manner, making it easier to draw conclusions. In this stage, data is typically displayed in the form of tables, charts, or graphs, which help to clarify patterns, trends, or relationships. The presentation of data allows researchers to visualize the findings in a coherent format, aiding in the interpretation and analysis of the results. Proper data presentation is crucial for effectively communicating research outcomes and ensuring that conclusions are well-supported by the data.

c. Conclusion

The conclusion is the final step in the data analysis process. Before forming conclusions, researchers review the written data to ensure a consensus is reached

on the findings. In this stage, the data that has been analyzed and processed is verified, ensuring its accuracy and reliability. The conclusions drawn are based on this verified data, and they can be justified and defended in terms of their validity. This step is crucial for ensuring that the research findings are sound and trustworthy, providing a solid foundation for any recommendations or decisions that follow.