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Integrated Transport System in Yogyakarta, Indonesia: Aspect Policy

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Abstract. The application of an intermodal transportation integration system will make it easier for people to carry out activities, guarantee travel travel time, and optimize the use of public transportation, and have an impact on reducing the use of private vehicles which can affect road performance. The policy for implementing the transportation integration system needs to be considered in order to accommodate travel activities by following regional development conditions. This study aims to determine the management integration and the constraints in implementing the transportation integration system. This study uses a qualitative method by taking into account the aspects of the policy which involve elements of regulators, operators and consumers. This research shows that the regulator is able to carry out the management of the transportation integration system through the implementation of government affairs in the transportation sector, however, there are obstacles in the form of regulatory linkages, coordination and limited authority. So it is necessary to optimize the role of regulators to be able to coordinate intensely with public transport operators in order to realize an integrated transportation system management that can meet the travel needs of the community.

Keywords: Integration; Policy; Public Transportation; Yogyakarta

1. Introduction

The development of regional transportation which includes land, sea, air and rail transportation is carried out in an integrated intermodal manner, which is realized by optimizing the provision of transportation network systems and services, managing travel needs, and using high technology in transportation development as mention by Governor of Special Region of Yogyakarta [1], research by Jean-Paul Rodrigue [2], Abou Senna, et.al [3], and Ahmad Munawar [4]. The implementation of transportation integration management must involve many cross-sectoral and regional stakeholders, namely the Regional Government and the House of Representatives (DPR) as the Regulator, State-Owned Enterprises (BUMN), Regional-Owned Enterprises (BUMD), and investors as Operators, as well as the public using transportation as consumers. When viewed from the perspective of the urban transportation integration system, there will be more elements in it because it pays attention to aspects of regional spatial planning, aspects of transportation systems and techniques, environmental aspects, and social and cultural aspects of society.

Yogyakarta is a city of education, tourism and culture that serves both domestic and foreign tourists and tourists, so the government provides many transportation nodes including airports, train stations, bus terminals and bus stops. In accommodating various transportation nodes, supporting facilities are needed to integrate the movement patterns of the community and tourists. There are transportation system problems in Yogyakarta that have a direct impact on the provision of highly capable and efficient transportation services, as described by Indonesian Ministry of Transportation [5] among others: there is still a lack of integration of service networks and road transportation infrastructure networks with other modes so that partially door-to-door services have not been realized, the unavailability of integration of public transport schedule and tariff services on various modes of transportation, minimal interconnection points / no connection points well-planned, and the absence of an institution that fully coordinates between governmental organizational units in Yogyakarta that can handle programs and activities for the management of the intermodal transportation integration system. To realize an increase in transportation services and an increase in intermodal integration, it is necessary to adapt to economic development, the level of technological progress, spatial planning policies, the environment and the level of development of a region as described by Errampalli, et.al [6].

Seeing the various problems of transportation integration mentioned above, it is necessary to improve the structure of the transportation system, and to facilitate the flow of people and goods moving both within cities and between cities, a transportation system is needed that can accommodate and provide certainty of travel time. The transportation integration system is one of the solutions to reduce the number of congestion, optimize the use of mass transportation, and facilitate the movement of people and goods [7], [8], [9]. For this reason, this research will analyze the integrated management of the transportation integration system in the Province of Yogyakarta Special Region, the obstacles faced in its implementation, as well as the transportation integration system management solutions.

2. Methods

Based on [10], The National Transportation System (SISTRANAS) has a very important role in a systemically organized transportation arrangement to serve as a guideline and basis for planning, development, transportation management in order to be able to realize the provision of effective and efficient transportation services. SISTRANAS is arranged in an integrated manner and is manifested in the National Transportation Order (TATRANAS), the Regional Transportation Order (TATRAWIL) and the Local Transportation Order (TATRALOK). The development of SISTRANAS needs to be made sustainable, consistent, and integrated between modes and other development sectors.

Management of a complex level of transportation services requires the Government and Public Transportation Authorities to innovate in the provision of transportation user services, because innovation is fundamental in achieving sustainable integrated transportation management. GIZ by Federal Ministry for Economic Cooperation and Development Jerman [11] stated that the Public Transportation Authority is needed to coordinate the planning and regulation of the public transportation system through subsidies and integrated transportation, therefore an independent institution that can coordinate public and private interests is needed. Department of Planning Western Australia [12] mention the Integrated Transportation Plan document is a tool to analyze the overall needs of the current and future transportation system in a regional government administrative area or in an agency work area that has transportation problems. Refers to the integrated transportation planning used (The Australian Department of Transport Metropolitan Transport Strategy) states that an integrated transportation system must have the principles of safety, efficiency, effectiveness, environmental responsibility, social responsibility, and responding to challenges.

One of the parameters in implementing a sustainable transportation system policy is the effectiveness and efficiency of public transportation as mention by Ahmad Munawar et.al [13]. This research is a policy research, namely research on a policy application of the transportation integration system with the dimensions of research relating to: (i). Policy formulation; (ii). Policy implementation; (iii). Policy performance; and (iv). Policy environment as described by Michael Hill [14]. The formal policies

discussed are decisions codified in writing and legalized or formalized so that they can take effect in a legal form which are grouped into three, namely laws, laws and regulations as mentioned by Riant Nugroho [15].

The method used is a type of qualitative research and an analytical description approach to analyze formal legal data on regional laws and the main tasks and functions of agencies within the Provincial Government of the Special Region of Yogyakarta (DIY) that support the implementation of regional government affairs related to the transportation system. Literature studies are used to formulate government programs in the management of integrated and sustainable transportation systems, which are then used as a basis for evaluating local laws and regulations and regional apparatus organizations, through descriptive analysis and in-depth interviews with local government agency stakeholders as mentioned in the book written by A. Rofiq Djaelani [16], Jo Moriarty [17], and Hossein Nassaji [18]. Retrieval of data by means of participatory observation and interviews with regulators, operators, and consumers in order to find out the integrated management of the transportation integration system in the Province of Yogyakarta Special Region, the obstacles faced in implementing it, as well as the transportation integration system management solution.

3. Result and Discussion

3.1. Integrated Transportation System in Special Region of Yogyakarta (DIY)

The result research by Thierry Vanelander and Shi, Xiaoning [19] Various forms of transportation system integration have been carried out in various approaches, including through the perspective of service integration, infrastructure investment or the application of information systems. Seeing the condition of DIY, referring to the division of authority between the State Government, Provincial Government and Regency or City Government as regulated in Law Number 23 of 2014 concerning Regional Government, the DIY Provincial Transportation Service as the organizer of regional government affairs in the field of transportation cannot implement the system. integrated and sustainable transportation management as a whole. However, the DIY Regional Government as a Regional Apparatus Organization that administers regional government affairs in the fields of: (i). Public works and spatial planning; (ii). Transportation; (iii). Living environment; (iv). Capital investment; and (v). Tourism; in accordance with the main tasks and functions of the competing agency or agency, able to complement each other partially in supporting the management of an integrated and sustainable transportation system.

On the other hand, although there are no regional laws and regulations that have a comprehensive and comprehensive scope for implementing an integrated and sustainable transportation system management program, all program criteria have been partially accommodated within the scope of the material for regional regulations related to transportation stipulated in DIY.

3.1.1. Transportation Management Policies are Integrated into Local Regulation

The DIY Regional Government accommodates the implementation of regional government affairs related to integrated transportation management policies into regional regulations as follows:

1. DIY Regional Regulation Number 2 of 2009 concerning the DIY Regional Long-Term Development Plan for 2005 s.d. 2025. It states that the long-term development direction of DIY related to transportation is: Pembangunan dan pelayanan sistem transportasi dan prasarana wilayah.
 - a. The creation of efficient and effective transportation in an integrated manner to support the economy, education and tourism.
 - b. Acceleration of rural development and development of small and medium-sized cities to reduce the gap between regions, as mentioned by Governor of Special Region of Yogyakarta [20].
2. DIY Regional Regulation Number 2 of 2010 concerning DIY Regional Spatial Planning for 2009 until 2029. It is stated in Article 11 paragraph (2) that the Regional Infrastructure System Development Plan consists of: road networks, railroad networks, marine transportation infrastructure networks, air transportation infrastructure networks, telematics networks, water

resources infrastructure, energy networks and infrastructure. environment. Further, Article 12 states that the road network development policy is:

- a. Increase accessibility to all Regions and penetrate isolation;
 - b. Creating maximum integration between various modes of transportation in the Region and cities in the Region;
 - c. Increase the effectiveness and efficiency of the road, as mention by Governor of Special Region of Yogyakarta [21].
3. DIY Regional Regulation Number 8 of 2015 concerning Regional Transportation Development Patterns. It is stated in Chapter II on Regional Transportation Development, that the development of regional transportation in the regions is realized by optimizing the provision of transportation network systems and services which include land, sea, air and rail transportation which is carried out in an integrated and intermodal way [1].

3.2. Constrains on Integrated Transportation System Management

There are still obstacles faced by the DIY regional government in managing an integrated and sustainable transportation system, namely:

3.2.1. The Discontinuity of Local Laws and Regulation

There are three areas of discontinuity of regional laws that are recognized by the Province of Yogyakarta, namely: a) The master planning of national and regional transportation infrastructure networks has not all been accommodated in the DIY RTRW (Regional Spatial Plan) document; b) The DIY RTRW (Regional Spatial Plan) document which is spatial or spatial related to the transportation network is not optimally aligned with the DIY sectoral RPJMD document; c) Medium or long term planning documents: RPJMD and RTRW DIY have not been optimally accommodated in short term planning documents: DIY RKPD, Work Plan and DPA SKPD.

3.2.2. Limited Authority

There are three points that become the limitation of authority in the scope of activities under the authority of the Central Government based on Law Number 23/2014 concerning Regional Government, including first, the development or provision of infrastructure for rail and air transportation. Second, organizing governmental affairs in the field of aviation sub-affairs. Third, the implementation of operations in government affairs in the transportation sector, sub-railroad affairs.

3.2.3. The Long Span of Control Between Regional Government Agencies in DIY

From the other research, such as articles on the analysis of transportation planning content in two cities in Canada, namely Toronto and Montreal. This study concludes about exploring the framework used and the language used in the transportation planning document to address the last mile (LMP) problem. Several policy recommendations expand on three themes drawn from content analysis with an emphasis on shared mobility, public-private partnerships and diversification of land use as a long-range strategy, as described by Justin B. Hollander [22]. This is of course different so that these three obstacles are encountered in the field compared to the research results of Bista, Hollander and Situ. Then the article written by Win Akustia [23] about integration between passenger transportation modes in Gorontalo City, Indonesia uses 3 main indicators (integrated infrastructure, integrated network, and integrated services) which concludes that people prefer to use private vehicles and bendor. In this study, it is suggested to make efforts to improve intermodal integration at the main node in Gorontalo City, including through the provision of various transfer facilities, increasing the integration of route networks and service systems. Meanwhile, in this study, the authors provide several considerations as an alternative to solving existing constraints.

3.3. Integrated and Sustainable Transportation System Management Mechanism

Forms of integrated transportation system management have been carried out in many countries from regional and national levels, one of which is the Intelligent Transportation System with the TSM & O (Transportation Systems Management and Operations) as mentioned by Hunt, K, et.al [24]. Further research [3] offers the planning and design stages of the integration of the TSM & O strategy as a routine method in business practice. The mechanism for administering regional government affairs of the DIY regional government in managing an integrated and sustainable transportation system can at least be optimized through the following considerations:

- a. All administering stakeholders (agency or agency) in carrying out their duties and functions remain within the limits, scope and authority mandated by laws and regulations;
- b. Optimizing the mechanism for planning and implementing regional development through strengthening the role of the DIY Regional Government OPD as a solution to the identified weaknesses;
- c. Forming a new work unit or management institution in stages according to the needs of the formation process and the actual conditions of transport carrying capacity.

The management of an integrated and sustainable transportation system in DIY can be implemented through the formulation of programs or activities of the proposed local government, namely: Integrated and Sustainable Transportation System Management Program, because it is supported by regional laws and can be implemented in accordance with the duties and authorities of 9 (nine) agencies or stakeholder agencies that have the same scope as the program.

The key in implementing an integrated and sustainable transportation system management program is to compile programs and activities into the implementation documents of the RKPD, Renja and DPA, because only with these documents the technical agencies have a legal basis in their implementation.

3.3.1. Conditions for Integrated and Sustainable Transportation System Management

1. Land Transportation Sector, Transportation Agency DIY

The Department of Transportation carries out its main duties and functions as limited to the given authority, namely in the management of road transportation modes, and does not have the authority to manage other transportation modes: rail and air. This makes it difficult to manage integrated transportation.

There is no law regulating integrated transportation between central and regional as well as between regions. This has resulted in the DIY Transportation Agency's policy of not being able to manage transportation at the district / city level, as well as the policies between Regency / City Governments that are not yet integrated. However, transportation management coordination can emulate cross-regional coordination platforms such as: the Yogyakarta - Sleman - Bantul Joint Secretariat (Sekber Kartamantul) or the Regional Spatial Planning Coordinating Board (BKPRD). This incompleteness is also evident in the management of road transportation modes, namely: the management of road facilities by the Department of Transportation and the management of road infrastructure by the Public Works Office, where program preparation and implementation are given to each SKPD.

Integrated transportation management is also influenced by policies to the Regions and DPRD regarding regional development priorities, furthermore related to proportional budgeting in transportation management.

2. Traffic Sector Transportation Agency DIY

The Transportation Agency only carries out programs and activities that have been compiled in the Regional Government Work Plan (RKPD) document in accordance with their main tasks and functions.

Integrated transportation management is still constrained by the limited authority of the Department of Transportation which only manages road mode transportation facilities, as well as licensing authority at the district / city level. However, it has been able to provide input on the integration of

the intermodal and intermodal transportation infrastructure network to managers of other modes of transportation (rail and air) at the national level.

The range of management coordination is felt to be quite long between the Transportation Agency and the national level transportation managers, as well as other agencies at the DIY regional government level. On the other hand, the proportionality of the transportation management budget is not balanced between the manager of road transportation facilities (Department of Transportation) and the manager of road transportation infrastructure (Department of Public Works).

3. Spatial Planning and Development Division, DIY Land and Spatial Planning Service

The Department of Land and Spatial Planning has compiled policies, strategies and plans for urban infrastructure development and integrated intermodal and intermodal integrated transportation infrastructure network development which is contained in the DIY RTRW (Regional Spatial Plan) Review Document which will be stipulated in 2017. RTRW (Regional Spatial Planning)) serves as a reference document for the integrated planning of the master plan (compiled by other agencies) to provide a spatial structure for the development of transportation infrastructure networks (road, rail, air and sea modes), as well as to provide the basis for coordinated implementation among SKPDs that implement integrated transportation systems. In addition, the RTRW Appendix (Regional Spatial Planning) also contains an indication of integrated transportation programs in the implementing SKPD and the required funding sources.

However, the RTRW document (Regional Spatial Plan) is not in line with the RPJMD document and the DIY Regional Government Work Plan (RKPD) and the SKPD Work Plan (Renja). This occurs because, among other things, the mechanism for the preparation of long term and medium term development planning documents (RPJMD and RTRW (Regional Spatial Planning)) is often preceded by short-term development planning documents (RKPD and Renja / Renstra SKPD) so that there is no continuity.

Until now, the implementation and supervision of regional spatial planning for the implementing SKPD sectors has not been carried out optimally, as well as the coordination of the implementation and supervision of the space with the Regency or City Government has not been optimal.

4. Environmental Pollution Sector, DIY Environmental Agency

The Environmental Agency has a role in determining quality standards for exhaust gas emission from motorized vehicles; drafting laws and regulations regarding the testing agency for emissions, noise, vibration and odor; as well as preparing ambient air testing of air quality status (only held in 2017). However, because the authority to carry out motor vehicle emission testing activities lies with the Regency / City Government, so BLH only encourages its implementation. Moreover, the test costs are borne by vehicle owners, so not many motorized vehicle owners carry out emission tests.

5. Public Work, Department of PUP & ESDM DIY

The PUP & ESDM Office plays a role in: compiling local regulations, providing policy recommendations, implementing District Financial Assistance mechanisms for planning and / or building new road networks, as well as implementing road infrastructure development, regulation, supervision and guidance in accordance with the authority of the DIY Regional Government.

Support for integrated transportation management is tailored to the main tasks and functions of each SKPD and efforts to integrate programs and activities between SKPDs are left to Bappeda. It is still felt that the coordination span is quite long between P2JN (Ministry of Public Works) and the Yogyakarta Regional Government in the development or rehabilitation activities of national roads connected to provincial roads.

In the case of new road network construction, the PUP & ESDM Office gets additional assignments to assess and pay land compensation in land acquisition activities which are the authority of the Regional Revenue and Management and Asset Service.

6. Sub Division of Transportation, Development Administration Bureau, DIY Regional Secretariat

The Development Administration Bureau plays a role in monitoring, facilitation and transportation studies related to the transportation sector, public works and the environment. All the implementation of SKPD's powers and functions has been optimal, while in its implementation the leading sector coordination between SKPDs depends on the material discussed. On the other hand, coordination and absorption of the aspirations of the community and other stakeholders are available for coordination and routine agendas in the Traffic Forum facilitated by the Transportation Agency.

In the course of implementing integrated transportation management, the obstacles faced include: DPRD political policies can change programs and activities that have been planned; as well as licensing of land use for transportation infrastructure networks is the authority of the Regency or City Government, so it needs a process and time in its implementation.

7. Facilities and Infrastructure Sector Bappeda DIY

Bappeda plays a role in: integrating various regional infrastructure development plans across sectors and regions; as well as controlling the implementation of regional development through monitoring and evaluation mechanisms. The DIY regional government has carried out all stages of regional planning and development mechanisms, as well as integrated transportation management. The limitation experienced by Bappeda is the limited allocation of funding to carry out studies / studies of integrated transportation management.

3.3.2. Evaluation of The Integrated Transportation System Management of The DIY Local Government

Through understanding the mechanisms for planning and implementing regional development and from the results: literature study, analysis, as well as descriptions and perceptions of the organizers, it is possible to identify several constraints / obstacles / weaknesses that cause less optimal integrated transportation management in DIY, namely as follows:

1. The key to carrying out integrated and sustainable transportation management is to include supporting programs and activities (appropriate functions) into the RKPD, Renja and DPA documents, because only with these documents can technical agencies carry out supporting programs and activities (according to their authority). integrated and sustainable transportation management.
2. RKPD, Renja and DPA as implementation documents of the RPJPD / RPJMD references, sectoral in the duties and functions of each technical agency. However, the infrastructure development mechanism requires a legal basis for the use of regional space contained in the RTRW document (Regional Spatial Planning), and if it does not accommodate the spatial program and structure in the related spatial map: (i). Urban System Development Plan; and (ii). Regional Infrastructure System Development Plan (in this case the infrastructure network and transportation services for all modes), the implementation of the development cannot be carried out in a legal review (legally flawed). Therefore the RTRW document (Regional Spatial Plan) must be in harmony and complement each other with the RPJPD / RPJMD document. Bappeda and the DIY Land and Spatial Planning Agency need to strengthen their coordination in harmonizing the material in them.
3. The RTRW document (Regional Spatial Planning) has become very important in the implementation of spatial-based infrastructure development, so that the integration of various master plans for road, rail, air and sea transportation infrastructure and service modes must have been accommodated in the RTRW document (Regional Spatial Planning). In this case, the Department of Land and Spatial Planning DIY must be the leading sector that has a high ability in the preparation of RTRW (Regional Spatial Planning) that accommodates various spatial / spatial-based infrastructure development plans.
4. If in the coordination mechanism between: (i). DIY Land and Spatial Planning Agency; (ii). Technical administering stakeholders (national level agencies and DIY Regional Government OPD); Regional planning coordinator (Bappeda and Regional Secretariat DIY); not proactively coordinating in accommodating transportation infrastructure and service network planning, the

material in the RTRW document (Regional Spatial Planning) does not optimally support the implementation of transportation management. Furthermore, there will be a gap between the need for transportation management and the planning document that contains SKPD programs and activities.

To illustrate the evaluation process that has been carried out, it can be seen in the following diagram:

4. Conclusion

Based on the analysis of the formal legal policies for the management of the transportation integration system, descriptive analysis and stakeholder perspectives on transportation management in DIY, and analysis of the implementation mechanisms and transportation integration system management institutions needed, it is concluded that: integrated transportation management in DIY can implement the scope of the program proposed, namely: Management of an Integrated and Sustainable Transportation System, because it is supported by regional laws and in accordance with the main duties and authorities of the relevant agencies in the DIY Regional Government. In order to overcome obstacles: (i). Discontinuity between regional planning documents; (ii). Limited scope of authority of the Central Government; and (iii). With a long span of coordination control, the mechanism and the establishment of the proposed transportation management unit and / or agency can be applied.

The keys to implement an integrated and sustainable transportation system management are: (i). Making master planning for integrated transportation infrastructure and service networks as a legal basis, and (ii). Ability to translate it into development documents of RKPD, Renja and DPA supporting agencies. Thus, the proposed program needs to be continued until the formulation of technical activities for the integration of infrastructure networks and integrated transportation services. Integrated transportation technical planning documents should be included in regional legislation as an implementable legal basis for local governments. Regional policy makers must establish policies in accordance with local conditions and wisdom in dealing with transportation problems which are closely related to the community's socio-culture and regional vision.

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References

- [1] Governor of Special Region of Yogyakarta. 2015. *Peraturan Daerah Daerah Istimewa Yogyakarta Nomor 8 Tahun 2015 Tentang Pola Pengembangan Transportasi Wilayah*. Yogyakarta.
- [2] Rodrigue, Jean-paul. 2006. "Intermodal Transportation and Integrated Transport Systems: Spaces , Networks Intermodal Transportation and Integrated Transport Systems: Spaces , Networks and Flows." *Intermodal Transportation and Integrated Transport Systems*, 2–25.
- [3] Abou-senna, Hatem, Essam Radwan, and Alexander Navarro. 2018a. "Integrating Transportation Systems Management and Operations into the Project Life Cycle from Planning to Construction: A Synthesis of Best Practices." *Journal of Traffic and Transportation Engineering (English Edition)* 5 (1): 44–55. <https://doi.org/10.1016/j.jtte.2017.04.006>.
- [4] Munawar, Ahmad. 2007. "Public Transport Reform in Indonesia , A Case Study in the City of Yogyakarta." *World Academy of Science, Engineering and Technology* 28: 39–44.
- [5] Badan Penelitian dan Pengembangan, Sekretariat Badan. 2012. *Studi Tinjau Ulang Tataran Transportasi Wilayah Provinsi DIY*. Jakarta: Kementerian Perhubungan Republik Indonesia.
- [6] Errampalli, Madhu, K S Patil, and C S R K Prasad. 2020. "Evaluation of Integration between Public Transportation Modes by Developing Sustainability Index for Indian Cities." *Case*

- Studies on Transport Policy* 8 (1): 180–87. <https://doi.org/10.1016/j.cstp.2018.09.005>.
- [7] Segola, Motshidisi, and Adewole S Oladele. 2016. "Traffic Congestion and Mobility Solutions for Francistown Road Transportation Network Systems." *BIE Journal of Engineering and Applied Sciences* 6 (2).
- [8] Radwan, Ahmed Hosney. 2015. "Intelligent Transportation System as a Tool for Solving Cairo's Transportation Problems." *International Journal of Scientific and Engineering Research* 6 (11). <https://doi.org/10.14299/ijser.2015.11.001>.
- [9] Cheng, Zhi Aaron, Min-Seok Pang, and Paul A Pavlou. 2016. "On Intelligent Transportation Systems and Road Congestion." In *Thirty Seventh International Conference on Information Systems*, 1–19. Dublin.
- [10] Menteri Perhubungan, 2005. Peraturan Menteri Perhubungan No. KM 49 Tahun 2005 Tentang Sistem Transportasi Nasional (SISTRANAS), Jakarta
- [11] GIZ. 2004. *Sustainable Urban Transport Improvement Project - 10 Principles for Sustainable Urban Transport*. Jerman: Federal Ministry for Economic Cooperation and Development.
- [12] Department of Planning, Western Australia. 2012. *Guidelines for Preparation of Integrated Transport Plans*. Australia: Western Australian Planning Commission.
- [13] Munawar, Ahmad., Muchlisin, Sebhatu, and Samuel Petros. 2013. "The Role of New Transport Policy on Creating Sustainable and Integrated Public Transit System in Jakarta (Case Study: Transjakarta, Indonesia And Freiburg, Germany)." Karstad University.
- [14] Hill, Michael. 2005. *The Public Policy Process*. 4th editio. London: Pearson-Longman.
- [15] Nugroho, Riant. 2013. *Metode Penelitian Kebijakan*. Yogyakarta: Pustaka Pelajar.
- [16] Djaelani, A. Rofiq. 2013. "Teknik Pengumpulan Data Dalam Penelitian Kualitatif." *Majalah Ilmiah Pawiyatan*, 2013.
- [17] Moriarty, Jo. 2011. *Qualitative Methods Overview*. London: School for Social Care Research
- [18] Nassaji, Hossein. 2015. "Qualitative and Descriptive Research : Data Type versus Data Analysis Qualitative and Descriptive Research : Data Type versus Data Analysis." *Language Teaching Research* 2 19 (2). <https://doi.org/10.1177/1362168815572747>.
- [19] Shi, Xiaoning, and Thierry Vanelander. 2010. "Design and Evaluation of Transportation Networks : Constructing Transportation Networks from Perspectives of Service Integration , Infrastructure Investment and Information System Implementation." *Journal of Economic Research and Electronic Networking* 11: 1–4. <https://doi.org/10.1007/s11066-010-9053-2>.
- [20] Governor of Special Region of Yogyakarta, 2009. *Rencana Pembangunan Jangka Panjang Daerah Tahun 2005 – 2025*. Yogyakarta: Peraturan Daerah DIY.
- [21] Governor of Special Region of Yogyakarta. 2010. *Rencana Tata Ruang Wilayah Provinsi Daerah Istimewa Yogyakarta*. Yogyakarta.
- [22] Bista, Shabnam, Justin B. Hollander, and Minyu Situ. 2020. "A Content Analysis of Transportation Planning Documents in Toronto and Montreal." *Journal of Case Studies on Transport Policy* 8 (2). <https://www.sciencedirect.com/journal/case-studies-on-transport-policy/vol/8/issue/2>.
- [23] Akustia, Win. 2016. "Evaluasi Keterpaduan Antarmoda Transportasi Di Kota Gorontalo." *Jurnal PenelitianTransportasi Multimoda* 14 (1): 31–40. <https://doi.org/10.25104/mtm.v14i1.82>.
- [24] Atkinson, J., Bauer, J., Hunt, K., et al. 2013. *Designing for Transportation Management and Operations*. Reston: Science Applications International Corporation.

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