

The Impact of Fly Over Construction at Simpang Ramayana Mall in An Effort to Reduce Traffic Logs and Community Economic Growth in Tanjungpinang City

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Abstract: This is descriptive research that describes the characteristics of the population or phenomenon being studied. So that this one research method is the main focus is to explain the object of research. The purpose of this study is to try to reduce the number of vehicles that use the DI road. The research method focuses more on discussing why an event or phenomenon occurs. The results described the construction of the fly over at the Ramayana intersection in Tanjungpinang City is a design whose goal is to try to prevent traffic jams from occurring at that location and to make travel time efficient so as to minimize the impacts such as wasted time due to traffic jams.

Keywords: Fly Over Development, Infrastructure, Tanjung Pinang

A. Introduction

The Riau Archipelago is the 32nd Province in Indonesia which was formed based on Law No. 25 of 2002, through the establishment of the Board of Struggle for the Formation of the Riau Islands Province (BP3KR). Where through this BP3KR struggle it yielded results namely where on September 24 2002 the Riau Islands were officially separated from the Riau Province and became the Riau Islands Province consisting of 2 Cities and 5 Regencies.

Then, the City of Tanjungpinang was designated as the Provincial Capital and determined the development of the government centre to be on Dompok Island as the central government area of the Riau Islands Province was ratified by the issuance of Decree (SK) Number 30 of 2007 on February 2, 2007 concerning Determination of Office Locations for the Riau Islands Provincial Government and the MoU between the Riau Islands Provincial DPRD number 01/MoU/I/2007 which was carried out on January 6, 2007, the Riau Islands Provincial Government has prepared a master plan (Master Plan) for the Riau Islands Provincial Government Office Centre in 2007 and revised it in 2012. And in 2015 after completing the construction of the office complex for the Governor of the Riau Islands Province, it was only used what previously using the old office was building on Jalan Basuki Rahmat.

The more developed an area, the faster the population growth, both natives and immigrants who occupy Tanjungpinang City. It is recorded at BPS Tanjungpinang City that in 2022 the population of Tanjungpinang City is 233,367 people. And there were recorded as many as 921,593 units of motorized vehicles, both two-wheeled and four-wheeled, which were registered as active at the Regional Revenue Agency for the Riau Islands Province.

This is what causes the increasing number of vehicles passing on the streets of Tanjungpinang City, especially during certain hours, namely in the morning when school starts and goes to work and in the afternoon when it's time to go home. The areas that have the most impact on this traffic jam are in the two worst points, namely on the DI Panjaitan road, to be precise at the intersection of four, the City of Plate and along the Basuki Rahmat road until it leads to the intersection towards Jalan Wiratno and the intersection to the one dampak bridge.

The development of an increasing population, both natives and immigrants, will affect the increase in transportation needs, both public and private vehicles, but the roads and road volume are not increasing. Based on the background above, the authors identify the problems in this study are 1) With the construction of the Tanjungpinang City Ramayana intersection fly over, it can reduce congestion; 2) With the construction of the Tanjungpinang City Ramayana intersection flyover, it can improve the economy of the people of Tanjungpinang; and 3) With the construction of the Tanjungpinang City Ramayana intersection flyover, there is a division of types of vehicles that can pass over it.

This article has research question, Is it possible to divert the flow of vehicles during peak hours to avoid long traffic jams? Can the construction of the fly over reduce the level of congestion in Tanjungpinang City? Will the construction of the fly over improve the economy and welfare of the local community?

The purpose of this study is to try to reduce the number of vehicles that use the DI road. Panjaitan and the Simpang Empat Mall Ramayana Tanjungpinang City whose aim is to reduce congestion which has negative impacts such as consuming travel time, making vehicle fuel wasteful, and air pollution caused by accumulated vehicle emissions, the construction of this fly over as well as being one of the icons of Tanjungpinang city In this study, the authors also hope that there will be changes before and after the construction of the flyover, both in terms of road users and as an economic bond for the surrounding community.

B. Literature Review

According to Komaruddin (2001) The definition of analysis is the activity of thinking to break down a whole into components so that it can recognize the signs of the components, their relationship to one another and the function of each in an integrated whole. According to Harahap in (Azwar, 2019) the definition of analysis is breaking or breaking down a unit into the smallest units. From the above opinion it can be concluded that analysis is an activity of thinking to describe or solve a problem from unit to smallest unit.

According to the Big Indonesian Dictionary "Analysis is the decomposition of a subject over its various parts and the study of the parts themselves and the relationships between the parts to obtain a proper understanding and understanding of the meaning of the whole". According to Sudjana (2016) "Analysis is an attempt to sort out integrity into elements or parts so that the hierarchy and/or structure are clear". According to Abdul Majid (2013) "Analysis is (the ability to describe) is to break down units into separate units, divide units into sub-subunits or parts, distinguish between two that are the same, choose and regarding differences (between several that are in one unit)".

From some of the opinions above, it can be concluded that analysis is an activity to find new findings on objects to be studied or observed by researchers by finding accurate evidence on these objects. Various methods have been taken by the Tanjungpinang city government and the Riau Islands Provincial government in reducing the number of vehicle density on the highway by providing shuttle buses for employees and school buses, but this number has not resolved the congestion problem that occurs. It can be seen that there are still many people who prefer to use private vehicles rather than using public buses because using private vehicles is simpler and more flexible because if using public buses the pick-up point and pick-up time have been set, this is very inefficient for employees or students who work overtime and additional class.

Therefore, the Provincial Government of the Riau Islands plans to build flyovers at the two intersections with the aim of breaking up the lanes of vehicles so that traffic jams do not occur at red light intersections and avoid traffic jams. So that on March 21, 2022, work on one flyover point will begin which is at the front junction of the Ramayana, Tanjungpinang City, with a budget of 60 billion and it will be carried out by PT. Panji as executor of flyover development activities.

This fly over is heading towards Dompok Island, where the work is currently 90% complete and has been roadworthy for 2 weeks from early January 2023 to mid-January 2023. But it has not been officially opened because there is still work to be done, such as painting poles, installing street lights and street lights. Road and sewer barriers.

In addition, there has been no determination of what types of vehicles can pass the fly over, considering that the road section on the fly over is ± 7 meters wide and has a length of ± 450 meters. It is divided into two directions, namely from Basuki Rahmat to the one Dompok bridge and from the one Dompok bridge to Jalan Basuki Rahmat.

The purpose of the construction of this fly over is as a means of solving road congestion problems in Tanjungpinang City as well as an addition to one of Tanjungpinang City which can add to the attractiveness of Tanjungpinang City and can be an increase in the community's economy through SMEs and other businesses around the fly over area. So that the fly over which is in the process of being finalized is made as beautiful as possible decorated with local wisdom ornaments and beautiful colorful lights and it is planned that the inauguration of this flyover will be held on

February 3 2023 which will be inaugurated directly by the Governor of the Riau Islands Province Mr. H. Ansar Ahmad, SE, MM

According to Agus Suryono (2001) development is a process of social change with broad participation in a society that is intended for social and material progress (including increased justice, freedom and other qualities that are valued) for the majority of the people through greater control. how much they gain from their environment. Regional development, infrastructure development, transportation development and sustainable development as well as non-physical development. Not only that, in order for the development to be appropriate, development goals or clear directions in development are needed, of course, and the point is to all Indonesian citizens or people in Indonesia. As with the notion of development and development goals, a consideration is needed before planning a development, namely the characteristics of the development, so that when formulating a development plan, at least development must be able to cover all the characteristics of development. What's more, sustainable development, development that is aware of environmental conditions. The term development can also be defined or given different meanings by one person to another, one country to another. However, in general there is agreement that development is a process of making changes. Development is a set of planned and directed efforts to produce something that can be used to meet needs and improve the welfare of life. So that when formulating a development plan, at least development must cover all the characteristics of development. What's more, sustainable development, development that is aware of environmental conditions. The term development can also be defined or given different meanings by one person to another, one country to another. However, in general there is agreement that development is a process of making changes. Development is a set of planned and directed efforts to produce something that can be used to meet needs and improve the welfare of life. so that when formulating a development plan, at least development must cover all the characteristics of development. What's more, sustainable development, development that is aware of environmental conditions. The term development can also be defined or given different meanings by one person to another, one country to another. However, in general there is agreement that development is a process of making changes. Development is a set of planned and directed efforts to produce something that can be used to meet needs and improve the welfare of life. Environmentally conscious development. The term development can also be defined or given different meanings by one person to another, one country to another. However, in general there is agreement that development is a process of making changes. Development is a set of planned and directed efforts to produce something that can be used to meet needs and improve the welfare of life. Environmentally conscious development. The term development can also be defined or given different meanings by one person to another, one country to another. However, in general there is agreement that development is a process of making changes. Development is a set of planned and directed efforts to produce something that can be used to meet needs and improve the welfare of life.

Siagian (1994) provides an understanding of development as "an effort or series of growth and change efforts that are planned and carried out consciously by a nation, state and government, towards modernity in the framework of nation building (nation building)". Meanwhile, Ginanjar Kartasasmita (1994) provides a simpler understanding, namely as "a process of change for the better through planned efforts. According to Deddy T. Tikson (2005) that national development can also be interpreted as a deliberate economic, social and cultural transformation through policies and strategies towards the desired direction. The transformation in the economic structure, for example, can be seen through an increase or rapid production growth in the industrial and service sectors,

As for development according to some experts, namely: development according to Rogers (Rochajat, et al, 2011) is a useful change towards a social and economic system that is decided as the will of a nation. Furthermore, according to WW Rostow (Abdul: 2004:89) development is a process that moves in a straight line, namely from underdeveloped societies to developed country societies. Development was originally used in the sense of economic growth. A community is considered successful in carrying out development, if the community's economic growth is high enough. Thus, what is measured is the productivity of society or the country's productivity every year. (Rochajat, et al: 2011: 3) this development is carried out with what is called a project. Development with projects that are studied from the aspect of environmental feasibility can be called environmentally sound development. Basically, environmentally sound development is carried out to realize sustainable development. Environmentally-oriented development is a conscious and planned effort to use and manage resources wisely in planned and sustainable development to improve the quality of life. The purpose of environmentally sound development is so that the development carried out does not damage the environment. For this reason, natural resource management needs to pay attention to environmental conditions so that the environmental ecosystem is not disturbed (Maharannie, 2013). One of these developments is the construction of road infrastructure to help city accessibility.

Flyovers are *fly over* is a freeway equipment to overcome obstacles due to conflicts at intersections and avoid areas/areas that always face traffic jam problems. As a flyover bridge generally consists of two main buildings, namely the superstructure and the substructure. This progress will certainly greatly help the smooth activities of the residents of Tanjungpinang City. The construction of flyovers actually provides benefits in reducing the number of congestions in areas that have heavy traffic, although each development certainly has its own impact. Impact is a change that occurs as a result of an activity. These activities can be natural, chemical, physical and biological (Soemarwoto, 1998).

According to Abdul Wahab (2009), the highway is a means of transportation that plays an important role in various community activities in an area, both urban and rural. Roads are one of the important infrastructures in serving the movement of people and goods. Quality road infrastructure will facilitate the distribution of goods transportation which in turn can increase the competitiveness of a country. The

condition of drainage channels and vehicles that pass repeatedly with a load that exceeds the maximum limit of the vehicle itself is one of the factors that can cause road damage, so that the activities of road users cannot run normally and can even lead to traffic accidents. To facilitate all types of activities that occur, adequate road conditions and quality are needed. Based on Law Number 38 of 2004 and Government Regulation of the Republic of Indonesia Number 34 of 2006 concerning Roads, public roads in Indonesia can be classified based on the road network system, road function, and road status and road class. Development activities will produce impacts, both on humans and the environment. Some of the positive things that are obtained with the construction of flyovers are that they can solve mobility and accessibility problems in order to increase traffic performance, because there is an increase in traffic speed on flyovers because usually the number of flyover accesses is limited, because vehicles traveling at low speeds will be higher than run at a higher speed. Public roads in Indonesia can be classified based on the road network system, road function, and road status and road class. Development activities will produce impacts, both on humans and the environment. Some of the positive things that are obtained with the construction of flyovers are that they can solve mobility and accessibility problems in order to increase traffic performance, because there is an increase in traffic speed on flyovers because usually the number of flyover accesses is limited, because vehicles traveling at low speeds will be higher than run at a higher speed. Public roads in Indonesia can be classified based on the road network system, road function, road status and road class. Development activities will produce impacts, both on humans and the environment. Some of the positive things that are obtained with the construction of flyovers are that they can solve mobility and accessibility problems in order to increase traffic performance, because there is an increase in traffic speed on flyovers because usually the number of flyover accesses is limited, because vehicles traveling at low speeds will be higher than run at a higher speed.

According to Boediningsih (2011) "traffic congestion occurs due to several factors, such as the number of road users who are not disciplined, road users who go against the flow, the lack of traffic officers supervising, the presence of cars parked on the road, the road surface is uneven, there are no crossing bridges and no restrictions on the type of vehicle. The road is a transportation infrastructure that includes all parts of the road, which is intended for traffic that is above ground level. In this modern era, in the development of increasingly advanced road transportation, humans need roads not only for pedestrians but also for wheeled vehicles. So, for this reason, a pavement structure and road leveling both using cementation and asphalt are needed.

Fly over is a bridge model that crosses over the road. Roads, toll roads, highways and flyovers are important facilities that support human life and their activities are also a benchmark in the development of a region and even a country. Fly over is an important facility and must be provided by the government if the road conditions in an area become very congested and cause congestion. According to Law Number 38 of 2004, roads as part of transportation infrastructure have an important role in the economic, social, cultural, environmental, political, defense and security fields, and

are used for the greatest prosperity of the people. Flyovers are organized among other things to expedite traffic in areas that have developed and to increase the distribution of goods and services to support increased economic growth. Based on this background, the researchers concluded that the existence of the fly over infrastructure would affect traffic conditions at the Ramayana intersection, Tanjungpinang City. The title of this research is "Analysis of the Impact of Fly over Construction at the Ramayana Intersection in an Effort to Reduce Traffic Congestion and Community Economic Growth in Tanjungpinang City"





Figure 3. Fly over the city of Tanjung Pinang

C. Methods

The methodology of this research is descriptive qualitative research, the use of qualitative research in education aims to describe a process of educational activities based on what is happening in the field as material for further study to identify weaknesses and strengths in education so that efforts to improve it can be determined (Zuriah, 2002).

D. Results and Discussion

Development aims to improve the welfare of the people. The role of the government as a mobilizer of development is very strategic in supporting the improvement of people's welfare and economic growth of the country. Today the world's need for infrastructure continues to increase along with increasing economic activity.

It is hoped that with the development of fly over infrastructure at the Ramayana intersection, Tanjungpinang City will get a positive value that can reduce the level of traffic congestion and can stabilize the flow so that people do not have to turn the path towards the one-dompok bridge which makes the journey longer.

According to data from the Riau Islands Regional Police, the number of vehicles in Tanjungpinang City as of November 2022 is 23,945 private cars, 157,310 motorized vehicles, 229 buses, 5,650 mini buses and 141 special vehicles. This number will continue to grow due to the easier it is to obtain motorized vehicles, as well as the unwillingness of the people of Tanjungpinang City to use public transportation and prefer to use private vehicles.

NO	POLRES/TA	MP	BUS	MB	SPD MOTOR RANSUS	TOTAL	%
1	KOTA BATAM	150.039	1.565	24.536	745.200	169	922.277 66,30
2	KOTA TANJUNG PINANG	23.943	229	5.650	157.310	141	187.348 13,47
3	KARIMUN	15.563	144	2.728	120.662	50	139.185 10,01
4	BINTAN	8.587	365	2.416	81.997	52	93.430 6,72
5	LINGGA	1.858	23	403	21.191	16	23.494 1,69
6	NATUNA	2.303	20	649	18.811	24	21.813 1,57
7	KEPULAUAN ANAMBAS	166	19	54	3.199	19	3.457 0,25
8	(TAK DIISI)	0	0	0	4	0	4 0,00
TOTAL		202.459	2.365	36.436	1.148.374	471	1.391.008

Last update : 2022-11-30 22:19:21

Figure 4. Riau Island Police 30 November 2022

With the existing road sections in Tanjungpinang City, it is inevitable that the time will come when Tanjungpinang City will become a city with traffic jams. Seeing the phenomenon in big cities in Indonesia, Tanjungpinang City should be able to take anticipatory steps through the construction of road widening or fly over construction. Because, with the increasing width of the road section and the existence of other road alternatives, the negative things arising from this congestion can be suppressed. One is to suppress the number of traffic accidents. So that with the development of fly over infrastructure at the Ramayana intersection in Tanjungpinang City, it can reduce the number of accidents. The traffic accident data for the last 4 years can be seen in the following table:

Table 2. Data of the Tanjungpinang City Resort Police

No	Years	Number of Accidents	Deaths	Serious Injuries	Minor Injuries
1	2018	83	17	4	132
2	2019	90	19	1	123
3.	2020	69	15	3	89
4.	2021	63	17	1	57
TOTAL NUMBER		305	68	9	401

In addition, fly over building infrastructure can produce business opportunities for communities around the Ramayana Tanjungpinang interchange fly over area, namely the opening of many coffee shops, ready-to-eat restaurants in the shop house next to the fly over construction which was once an empty shop house, the surrounding community also opened many food stalls and kelongtong stalls whose houses around Fly over. This is also an opportunity for new jobs for the people of Tanjungpinang city. With this, there is a need for synergy between residents, agencies, work units, and contractors who carry out development activities really bring benefits whose main goal is to reduce the number of road congestion also has a good impact on the surrounding community.

In addition, making it a fly over as an icon and tourism object through a local wisdom festival held and holding a bazaar on February 3, 2023 as the inauguration of a fly over whose purpose is to increase domestic and international tourists to come to Tanjungpinang City. It aims to be utilized by the people of Tanjungpinang as a business opportunity and as an opportunity for guide tour services that can improve the economy and community welfare.

Then from that, the Covid-19 pandemic that has been attacking for three years has weakened the economy from all sectors, so that people's purchasing power has also weakened. Which resulted in many businesses, be it small, medium, or large companies, many losing money and choosing to reduce their workforce to reduce the amount of company financing. This has a bad impact on people who experience layoffs due to loss of livelihood in meeting daily needs.

For this reason, the government's efforts in the development of this Flyover infrastructure which functions in addition to being an alternative route for motorists are also used as beautifully as possible so that later it can be used as a new icon of the city of Tanjungpinang which brings many visitors to take selfish so that it can enliven the businesses around and spend guessing merchandise that can increase the ability of entrepreneurs to open and add new job vacancies so that the wheels of the economy of the city of Tanjungpinang will be more advanced and the county can also increase its revenue through local taxes.



Figure 5. Mall Ramayana Tanjungpinang City



Figure 6. Fly Over Simpang Ramayana Tanjungpinang City

E. Conclusion

The construction of the fly over at the Ramayana intersection in Tanjungpinang City is a design whose goal is to try to prevent traffic jams from occurring at that location and to make travel time efficient so as to minimize the impacts such as wasted time due to traffic jams.

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