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Research paper

impact of generated traffic in construction of Islamic PG, kindergarten, primary school and al Azhar Islamic college in Cairo Palembang

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Abstract

Traffic impact analysis (andalalin) is a special study aimed at assessing the effects caused by traffic generated by the development of the surrounding area. Andalalin is essentially an analysis of the influence of land use development on the surrounding traffic system, caused by the generation of new traffic, traffic displacement and vehicles entering and leaving the study area . As part of this research, the aim is to know the extent of the construction of the Islamic college, kindergarten and elementary school of Al-Azhar, Cairo Palembang and the extension of permits operating premises located on Jl. Jendral Sudirman/road Mohammad Ali Km 3.5, Kemuning District, Palembang City, regarding surrounding traffic and management of resulting traffic impacts. The purpose of the research is to analyze the traffic performance of the Islamic PG Development, Kindergarten, Elementary Schools and Middle Schools of Al-Azhar Cairo Palembang and the expansion of operating permits located on road .Jendral Sudirman/road. Mohammad Ali Km 3.5, Kemuning district, Palembang city. The systematic study process carried out at the initial stage of this traffic impact study involves carrying out traffic modeling and forecasting. The Traffic Impact Monitoring and Assessment Plan addresses significant impacts including vulnerability, road accidents, traffic jams and the level of community unrest around the construction of Al-Azhar Islamic College, kindergarten, primary school, Cairo Palembang and the extension of operating permits. located on road Jendral Sudirman/road. Mohammad Ali Km 3.5 Kemuning District, Palembang City.

Keywords: *Andalalin; Al-Azhar Islamic Building; Palembang City Significant Impact.*

1. Introduction

The construction of a certain area or location as part of the transportation system will create the possibility of additional travel during construction, which will influence or impact the surrounding traffic conditions.
Traffic impact analysis (andalin) is a special study aimed at assessing the effects caused by traffic generated by the development of the surrounding area. Andalalin is essentially an analysis of the influence of land use development on the surrounding traffic system, caused by the generation of new traffic, traffic displacement and vehicles entering and leaving the study area. When implementing Andalalin's activities, points regarding the implementation of traffic management analysis are clarified by Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 75 of 2015.
A simple impact can be interpreted as a positive or negative influence. As in Law No. 22 of 2009 concerning Road Traffic and Transportation and Government Regulation No. 30 of 2021 concerning Implementing Regulations of Law No.11 of 2020 Concerning Job Creation for the road traffic and transport, it is specified that to obtain approval of the results of the traffic impact analysis, the developer or builder must submit the results of the traffic impact analysis to the minister responsible in the area of traffic. and road transportation facilities and infrastructure, the governor, regent or mayor according to his authority. Traffic impact analysis is often carried out in the form of a special study of building construction and other land uses on the city's transportation system, particularly the road network around the location of the building. Several studies related to Andalalin have successfully identified or predicted traffic impacts that occur after the building is commissioned (Jamani et al., 2016; Rahman et al., 2018; Rantung et al., 2015; Styawan et al., al., 2019). Several other studies aimed at examining the development requirements of educational centers have also been carried out (Firdaus, 2017; Roza et al., 2020). As part of this research, the aim is to know the extent of the construction of the Islamic college, kindergarten and elementary school of Al-Azhar, Cairo Palembang and the extension of permits operating premises located on Jl. Jendral Sudirman/Jl. Mohammad Ali Km 3.5, Kemuning District, Palembang City, regarding surrounding traffic and management of resulting traffic impacts. The purpose of the research is to analyze the traffic performance of the Islamic PG Development, Kindergarten, Elementary Schools and Middle Schools of Al-Azhar Cairo Palembang and the expansion of operating permits located on road Jendral Sudirman/ road Mohammad Ali Km 3.5, Kemuning District, Palembang City and Prepare recommendations and implementation plans to manage the impacts regarding the mitigation required if the new generation of traffic that arises is expected to reduce the performance of road services and intersection around the construction site.

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2. Research methodology

2.1. Secondary data collection

Secondary data collection is carried out by collecting existing data, related to the study. Data obtained from Palembang City Regional Development Planning Agency, Palembang City Central Statistics Agency in figures for 2022 and Palembang City Transportation Department. In conjunction with secondary data, it is then used to prepare primary data requirements, collection schedule, computerization and data analysis.

2.2. Primary data collection

Primary data is used to obtain data and information regarding traffic and transportation conditions. The primary data survey carried out took the form of a traffic flow calculation survey by counting the number of vehicles traveling on roads and intersections.
These survey data are very useful for transport studies which include surveys aimed at finding data and information on the level of existing road services. The type of survey carried out is in the form of calculations of classified traffic flows on roads and intersections.

2.3. Traffic characteristics

Based on field observations and after data processing, it can be seen that the works in the affected areas are due to the technical recommendations for traffic impacts (Middle Awakening) Construction of PG, kindergarten, of Al-Azhar Primary School and Islamic College. in Cairo to manage traffic impacts Middle Awakening Construction of PG, kindergarten, primary school, Al-Azhar Islamic College in Cairo Palembang and extension of operating permits located on road Jendral Sudirman/ road Mohammad Ali Km 3.5, Kemuning District, Palembang City.

3. Results and discussion

3.1. Road inventory data

Table 1: Inventory of Dr. Muhammad Ali Construction Location of PG School, Kindergarten, Primary School and Al-Azhar Islamic College in Palembang

No	Road Section Name	Type Road	Path Width Effective (m)	Separator	Obstacle Side	Wide Shoulder (m)	Median Width (m)
1	Road Dr. Muhammad Ali	2/2 UD	7,5 m	50-50	Low (L)	1,8	-

According to the analysis results, the road that directly accesses road Dr. Muhammad Ali or access road to PG School, Kindergarten, Primary School, Al-Azhar Islamic College in Palembang , namely a two-lane, two-way divided road, namely (2/2 UD), 7.5 meters wide, right shoulder 1.8 m and left shoulder 1.8 m. Type of side barriers for road Dr. Muhammad Ali is low (low) with a direction separation factor of 50-50%. Meanwhile, the results of calculating the capacity of roads outside the city using the Indonesian Road Capacity Manual (MKJI) 1997 can be seen in Table 2.
Calculation of road sections for Palembang City Road or Dr. Muhammad Ali has a road capacity of 2371.62 pcu/hour. This result is a calculation of the basic road capacity (Co) of 2,900 pcu/hour, the lane width correction factor (FCw) of 0.87, the direction spacing correction factor (FCsp) of 1.00, the lateral obstacle correction factor (FCsf) of 0.94. and the adjustment factor due to the size of the outer city (FCs) is 1.00.

Table 2: Capacity of Road Sections Dr. Muhammad Ali Around PG School, Kindergarten, Primary School and Al-Azhar Islamic College in Palembang

No	Road Section Name	Basic Capacity Co (junior/hour)	Adjustment Factor FCw	FCsp	FCsf	FCcs	Capacity Co (pcu/hour)
1	Street Dr. Muhammad Ali	2900	0,87	1,00	0,94	1,00	2371,62

Free-flow speed is the speed at zero flow level, that is, the speed the driver would choose if not influenced by other vehicles. The free speed makes it possible to calculate the average speed of light vehicles which is a function of the value of the degree of saturation. For the results of calculating the free traffic speed of each road section around the construction of PG School, Kindergarten, Elementary School and Al-Azhar Islamic College in Palembang.

Table 3: Free Flow Speed of Road Section Dr. Muhammad Ali in the Vicinity of the Al-Azhar Palembang Islamic PG, Kindergarten, Elementary School and Middle School Construction Site

No	Road Section Name	Adjustment Factor Fvo (Km/Hour)	FVw (Km/Hour)	FFVsf	FFVcs	Speed free (Km/Hour)
1.	Street Dr. Muhammad Ali	42	-3	0,98	1,00	-123,48

Based on Table 3, Dr. Muhammad Ali has a free speed of -123.48 km/hour. This value is the result of the sum of the basic free flow speed adjustment factor Fvo of 42 km/hour, with a speed adjustment factor for track width (Fvw) of -3, then multiplied by a speed adjustment factor for side obstacles (FFVsf).) of 0.98 and a city size speed adjustment factor of 1.00.

3.2. Performance of existing road sections (2023)

Under the existing conditions, it is necessary to analyze the performance of the road network in the form of road segment performance and intersection performance. This is important to do as it is a baseline analysis that will be used to measure the extent of influence of the construction activities of the Islamic PG School, Kindergarten, Primary School and Al-Azhar Palembang college on the surrounding traffic. Here are the results of calculating the performance of existing road sections as shown in Table 4.

Table 4: Level of Service for Dr. Muhammad Ali at the Al-Azhar Islamic PG School, Kindergarten, Elementary School and Middle School Construction Site in Palembang

No	Time	Capacity (C) (Junior School/Hour)	Volume (Q) (Junior School/Hour)	Degree of Saturation (Q/C)	Service level
1	Road Dr. Muhammad Ali	2371,62	20.65	0,0087	A

The VC ratio can also be considered as the degree of saturation (DS), i.e. the comparison between traffic volume and road capacity. The traffic flow is said to be saturated (DS close to 1) when it approaches its capacity. Capacity data is obtained through calculations using correction factors that have been explained in the previous subchapter, while traffic volume data is obtained through previous surveys, while traffic volume data traffic are obtained through surveys, then the most important data are taken which will be used in calculating the degree of saturation of road sections (DS).

a) Performance of road Dr. Mohammed Ali

According to the calculation results, the current status of Dr. Muhammad Ali, who has direct access to the construction of PG schools, kindergartens, elementary schools and Al-Azhar Islamic colleges in Palembang, is road Dr. Muhammad Ali has a saturation degree (DS) value of 0.0087 and the speed on this highway is -123.48 km/hour. The road service level is at Level A. Traffic volume is approaching or reaching capacity.

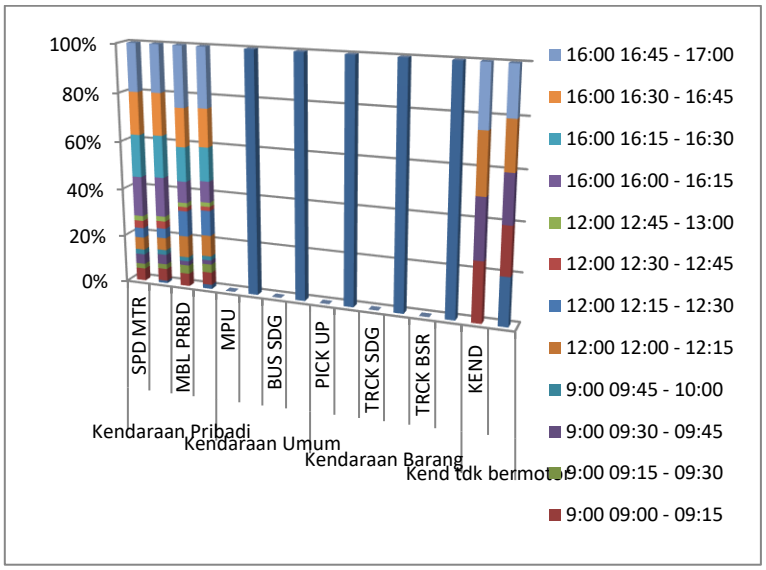


Fig. 1: Fluctuations in Traffic Volume on Dr. Muhammad Ali.

From Simpang Jenderal Sudirman to PG School, Kindergarten, Primary School, Al-Azhar Islamic College in Palembang highest Monday afternoon.

b) Intersection performance under existing conditions

Table 5: Intersection Performance Under Existing Conditions

No	Name of the intersection	Degrees Fed up (DS)	Delay (second/junior)	LOS
1.	Road Dr. Muhammad Ali	0,0087	13,71	C

c) Intersection Performance in Existing Conditions

Table 6: Intersection Performance in Existing Conditions

No	Name of the intersection	Degrees Fed up (DS)	Delay (second/junior)	LOS
1.	Road Dr. Muhammad Ali	0,0087	13,71	C

Based on the results of the delay analysis at the Dr. Jalan intersection. Muhammad Ali is 13.71 seconds with the level of service at intersections at level C. The VC ratio can be considered as the degree of saturation (DS), namely the ratio of traffic volume to road capacity, flow traffic is said to be saturated (if DS is close to 1), if it approaches its capacity. Capacity data is obtained through calculations using the correction factors explained in the previous subsection, while traffic volume data is obtained through classified traffic count surveys on each road section. From the survey results, the largest volume of data is then extracted, which will be used in the calculation of the degree of saturation of the road section (DS).

3.3. Performance of existing roads and intersections on site

Table 7: Calculation of Capacity (C) for Dr. Muhammad Ali

No.	Indicator	Value
1.	Basic Capacity (Co)	2900
2.	Adjustment Factor Due to Traffic Lane Width (FCw)	0,87
3.	Adjustment FactorDue to Direction Separation (FCsp)	1,00
4.	Adjustment Factor Due to Side Obstacles (FCsf)	0,94
5	Adjustment Factor Due to City Size (FCcs)	1,00
	Total Capacity	2371,62

Source: Data Analysis Results, 2023

Performance of Dr. Muhammad Ali from the direction of the entrance and exit access intersection to Al-Azhar Islamic School in Cairo Palembang, the analysis was carried out using the 1997 MKJI method.
The results of the analysis of Table 8. The above analysis shows the conditions, namely that the above table provides information on the capacity of road Dr. Muhammad Ali, from the access intersection of entry and exit to the Al-Azhar Islamic School in Cairo, Palembang, can facilitate traffic flow without obstacles.

Table 8: Performance of the Dr. Muhammad Ali from the Direction of the Exit and Entry Intersection Towards the Al-Azhar Islamic School Cairo Palembang (V/C Ratio)

Day	Peak Hours	Capacity Road	Traffic Volume (Junior School/Hour)	V/C Ratio	Level Service
Monday (Working days)	Morning	2371,62	27,4	0,0100	A
	Afternoon	2371,62	69,9	0,0295	A
	Afternoon	2371,62	17,9	0,0065	A
Tuesday (Working days)	Morning	2371,62	26,7	0,0097	A
	Afternoon	2371,62	71,72	0,0302	A
	Afternoon	2371,62	20,9	0,0076	A
Wednesday (Working days)	Morning	2371,62	28,2	0,0103	A
	Afternoon	2371,62	61,7	0,0260	A
	Afternoon	2371,62	27,4	0,0100	A
Thursday (Working days)	Morning	2371,62	20,65	0,0087	A
	Afternoon	2371,62	66,35	0,0279	A
	Afternoon	2371,62	14,06	0,0059	A
Friday (Working days)	Morning	2371,62	19,0	0,0105	A
	Afternoon	2371,62	68,6	0,0289	A
	Afternoon	2371,62	17,7	0,0064	A
Saturday (Working days)	Morning	2371,62	19,0	0,0069	A
	Afternoon	2371,62	11,3	0,0041	A
	Afternoon	2371,62	21,9	0,0080	A
Sunday (Holiday)	Morning	2371,62	15,2	0,0055	A
	Afternoon	2371,62	12,7	0,0046	A
	Afternoon	2371,62	10,7	0,0039	A

Source: Data Analysis Results, 2023.

Performance of road Dr. Muhammad Ali from the direction of the entrance and exit access intersection to Al-Azhar Islamic School of Cairo Palembang, the analysis carried out according to the MKJI method of 1997, obtained the results following:

Table 9: Performance of Road Dr. Muhammad Ali from the Direction of Al-Azhar Islamic School Cairo Palembang to the Entrance and Exit Access Intersection (V/C Ratio)

Day	Peak Hours	Capacity Road	Traffic Volume (Junior School/Hour)	V/C Ratio	Level Service
Monday	Morning	2371,62	11,9	0,0004	A
(Working days)	Afternoon	2371,62	71,35	0,0300	A
	Afternoon	2371,62	20,5	0,0075	A
Tuesday	Morning	2371,62	7,8	0,0028	A
(Working days)	Afternoon	2371,62	61,4	0,0258	A
	Afternoon	2371,62	21,0	0,0077	A
Wednesday	Morning	2371,62	23,0	0,0084	A
(Working days)	Afternoon	2371,62	57,4	0,0242	A
	Afternoon	2371,62	26,3	0,0096	A
Thursday	Morning	2371,62	11,9	0,0004	A
(Working days)	Afternoon	2371,62	55,1	0,0232	A
	Afternoon	2371,62	20,5	0,0075	A
Friday	Morning	2371,62	20,5	0,0075	A
(Working days)	Afternoon	2371,62	71,6	0,0302	A
	Afternoon	2371,62	31,5	0,0115	A
Saturday	Morning	2371,62	9,2	0,0034	A
(Working days)	Afternoon	2371,62	8,4	0,0031	A
	Afternoon	2371,62	22,9	0,0084	A
Sunday	Morning	2371,62	6,2	0,0023	A
(Holiday)	Afternoon	2371,62	9,2	0,0034	A
	Afternoon	2371,62	23,0	0,0084	A

Source: Data Analysis Results, 2023

The results of the analysis are taken from Table 9. The above analysis shows the conditions, namely: Providing information on the capacity of street Dr. Muhammad Ali from the management of Al-Azhar Islamic School in Cairo Palembang towards the entrance and exit access intersection can facilitate traffic flow without obstacles. To overcome the problems that may arise such as: traffic jams, delays, etc., as a result of an increase in vehicle growth of 10% each year and there will be an increase in traffic volume as in the table below :

Table 10: V/C Forecast for the Next 5 Years From 2023 to 2028 Road Dr. Muhammad Ali from the Entrance and Exit Access Intersection Towards the Al-Azhar Islamic School Cairo Palembang (With the Project)

Day	Peak Hours	2023	Sl	2024	Sl	2025	Sl	2026	Sl	2027	Sl	2028	Sl
Monday (Working days)	Morning	0,0100	A	0,0101	A	0,0102	A	0,0103	A	0,0104	A	0,0105	A
	Afternoon	0,0295	A	0,0296	A	0,0297	A	0,0298	A	0,0299	A	0,0300	A
	Afternoon	0,0065	A	0,0066	A	0,0067	A	0,0068	A	0,0069	A	0,0070	A
Tuesday (Working days)	Morning	0,0097	A	0,0098	A	0,0099	A	0,0100	A	0,0101	A	0,0102	A
	Afternoon	0,0302	A	0,0303	A	0,0304	A	0,0305	A	0,0306	A	0,0307	A
	Afternoon	0,0076	A	0,0077	A	0,0078	A	0,0079	A	0,0080	A	0,0081	A
Wednesday (Working days)	Morning	0,0103	A	0,0104	A	0,0105	A	0,0106	A	0,0107	A	0,0108	A
	Afternoon	0,0260	A	0,0261	A	0,0262	A	0,0263	A	0,0264	A	0,0265	A
	Afternoon	0,0069	A	0,0070	A	0,0071	A	0,0072	A	0,0073	A	0,0074	A
Thursday (Working days)	Morning	0,0087	A	0,0088	A	0,0089	A	0,0090	A	0,0091	A	0,0092	A
	Afternoon	0,0279	A	0,0280	A	0,0281	A	0,0282	A	0,0283	A	0,0284	A
	Afternoon	0,0059	A	0,0060	A	0,0061	A	0,0062	A	0,0063	A	0,0064	A
Friday (Working days)	Morning	0,0105	A	0,0106	A	0,0107	A	0,0108	A	0,0109	A	0,0110	A
	Afternoon	0,0115	A	0,0116	A	0,0117	A	0,0118	A	0,0119	A	0,0120	A
	Afternoon	0,0064	A	0,0065	A	0,0066	A	0,0067	A	0,0068	A	0,0069	A
Saturday (Working days)	Morning	0,0069	A	0,0070	A	0,0071	A	0,0072	A	0,0073	A	0,0074	A
	Afternoon	0,0041	A	0,0042	A	0,0043	A	0,0044	A	0,0045	A	0,0046	A
	Afternoon	0,0080	A	0,0081	A	0,0082	A	0,0083	A	0,0084	A	0,0085	A
Sunday (Holiday)	Morning	0,0055	A	0,0056	A	0,0057	A	0,0058	A	0,0059	A	0,0060	A
	Afternoon	0,0046	A	0,0047	A	0,0048	A	0,0049	A	0,0050	A	0,0051	A
	Afternoon	0,0039	A	0,0040	A	0,0041	A	0,0042	A	0,0043	A	0,0044	A

Information :
Sl=Service Level
Assumption: The annual vehicle growth rate is 1%
Source: Data analysis results, 2023

Table 11: V/C Forecast for the Next 5 Years From 2023 to 2028 Road Dr. Muhammad Ali from the Direction of the Al-Azhar Islamic School Cairo Palembang Towards the Entry and Exit Access Intersection (with the Project)

Day	Peak Hours	2023	Sl	2024	Sl	2025	Sl	2026	Sl	2027	Sl	2028	Sl
Monday (Working days)	Morning	0,0023	A	0,0024	A	0,0025	A	0,0026	A	0,0027	A	0,0028	A
	Afternoon	0,0300	A	0,0301	A	0,0302	A	0,0302	A	0,0303	A	0,0303	A
	Afternoon	0,0084	A	0,0085	A	0,0086	A	0,0087	A	0,0088	A	0,0089	A
Tuesday (Working days)	Morning	0,0028	A	0,0029	A	0,0030	A	0,0031	A	0,0032	A	0,0033	A
	Afternoon	0,0258	A	0,0259	A	0,0260	A	0,0261	A	0,0262	A	0,0263	A
	Afternoon	0,0077	A	0,0078	A	0,0079	A	0,0080	A	0,0081	A	0,0082	A
Wednesday (Working days)	Morning	0,0029	A	0,0030	A	0,0031	A	0,0032	A	0,0033	A	0,0034	A
	Afternoon	0,0242	A	0,0243	A	0,0244	A	0,0245	A	0,0246	A	0,0247	A
	Afternoon	0,0096	A	0,0097	A	0,0098	A	0,0099	A	0,0100	A	0,0101	A
Thursday (Working days)	Morning	0,0034	A	0,0035	A	0,0036	A	0,0037	A	0,0038	A	0,0039	A
	Afternoon	0,0232	A	0,0233	A	0,0234	A	0,0235	A	0,0235	A	0,0236	A
	Afternoon	0,0004	A	0,0005	A	0,0006	A	0,0007	A	0,0008	A	0,0009	A
Friday (Working days)	Morning	0,0029	A	0,0030	A	0,0031	A	0,0032	A	0,0033	A	0,0034	A
	Afternoon	0,0112	A	0,0113	A	0,0114	A	0,0115	A	0,0116	A	0,0117	A
	Afternoon	0,0115	A	0,0116	A	0,0117	A	0,0118	A	0,0119	A	0,0120	A
Saturday (Working days)	Morning	0,0034	A	0,0035	A	0,0036	A	0,0037	A	0,0038	A	0,0039	A
	Afternoon	0,0031	A	0,0032	A	0,0033	A	0,0034	A	0,0035	A	0,0036	A
	Afternoon	0,0084	A	0,0085	A	0,0086	A	0,0087	A	0,0088	A	0,0089	A
Sunday (Holiday)	Morning	0,0004	A	0,0005	A	0,0006	A	0,0007	A	0,0008	A	0,0009	A
	Afternoon	0,0057	A	0,0058	A	0,0059	A	0,0060	A	0,0061	A	0,0062	A
	Afternoon	0,0075	A	0,0076	A	0,0077	A	0,0078	A	0,0079	A	0,0080	A

Information :
Sl=Service Level
Assumption: The annual vehicle growth rate is 1%
Source: Data analysis results, 2023

3.4. Traffic modeling

The systematicity of the study process was achieved. In this regard, the first step in this traffic impact study is to carry out traffic modeling and forecasting. Based on classical theory, the traffic demand modeling and forecasting process in this study includes 4 (four) stages of activity, including:

a) Road network model

The road network in question is the road network around the study site whose catchment area/zone of influence is estimated to still be significantly affected by the impact of development. The road network is modeled for the base year and the plan year. Data from road inventories and field observations form the basis for establishing the road network for the reference year. Additionally, the road network for the planning year will be created based on information on committed road development plans/projects as well as simulations of various recommendations to improve road performance. Capacity on road sections is calculated based on the Indonesian Road Capacity Manual (MKJI).

b) Preparing the traffic demand model

Traffic demand can be identified from the origin of the travel destination, created in the form of a source/destination matrix. The original target matrix can be obtained from previous studies and, before use, it should be validated against the existing conditions of the study area based on data obtained from field surveys. Then, the traffic demand model is calibrated (four-step modeling).

c) Traffic demand forecasting

Estimates of future traffic demand are predicted by applying traffic models to regional development, population growth and economic dynamics in the study area.

d) Traffic pricing

The road system of the study area covers the entire road network based on a road network map. The computerized base map of the road network system is organized in such a manner and presented in the form of nodes and links.

A node represents a road intersection/meeting or a point where a change in the characteristics of a road segment occurs, while a link represents a road segment. Each link will be connected to each other to form a continuous network called a road network system.

The centroid connector is a type of link that is not connected to another link at one end and functions to accommodate traffic to and from a traffic zone (limited area).

Each node and link has unique characteristics and contains the following information (attributes):

a) Nodes contain information regarding coordinates, traffic direction parameters and other information related to traffic conditions and intersections.
b) The link contains information regarding the length and width of the road, the number of traffic lanes, the vehicle type (mode) of operation, traffic flow functions (speed-volume function, deceleration volume, etc.).

Then, all the information about the nodes and links is fed into a database in a certain format to be used as input data using software. Below you will find the principles for building a road network database.

4. Conclusion

a) Construction of PG, Kindergarten, Elementary School, Al-Azhar Islamic College in Cairo Palembang and extension of operating permits located on road Jendral Sudirman/ road Mohammad Ali Km 3.5 Kemuning District, Palembang City.
b) Recommendations to manage the impact of traffic on the construction of Islamic PG, Kindergarten, Elementary School and Al-Azhar Islamic College in Cairo Palembang with details:
c) Increase in road capacity
d) Ensure traffic management and engineering
e) Managing traffic needs
f) Provision of parking lots
g) Private vehicles and transport trucks
h) Arrangement of traffic in the area
i) Provision of road equipment in the area
j) The responsibility for implementing traffic impact management in accordance with the recommendations lies with the initiator of internal and external processing operations having a direct impact. Meanwhile, government responsibility takes the form of macro-management of the network.
k) The Traffic Impact Monitoring and Assessment Plan addresses significant impacts including vulnerability, road accidents, traffic jams and the level of community unrest around the construction of Al-Azhar Islamic College, kindergarten, primary school, Cairo Palembang and the extension of operating permits. located on road Jendral Sudirman/ road Mohammad Ali Km 3.5 Kemuning District, Palembang City.
l) The prime contractor for the development of Al-Azhar Islamic PG in Cairo, kindergarten, primary school and middle school in Palembang is the Palembang Chemical Engineering Foundation, which will be supervised, monitored and evaluated for the traffic impacts by relevant regional agencies which will be reported to Palembang. City Transport Agency.

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