

Transport Planning System and Management of Davao City: A Perceptual Study

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Abstract

This study is a collection of opinions taken from the general public in the city of Davao, in the Philippines, with regards to the implementation and strategies concerning the local transport management. In particular, the study looks into the points of view of commuters and drivers alike. Also, it looks into the common violations made by professional and non-professional drivers, as well as the incidence of jay-walking with respect to the commuters.

Keywords: *transport planning, Davao City transport, Taxi drivers, commuters, traffic management,*

1. Introduction

1.1 General

Transportation is critical to the functioning of society and helps shape an area's economic health and quality of life. Not only does the transportation system provide the mobility of people and goods, it also influences patterns of growth and economic activity by providing access to land.

Transport planning is a complex process involving careful forecasting of future needs and study of existing travel pattern in the city which critical to Davao's sustainable development and can be enhanced and protected through integrated planning approach. Transportation planning and management system could provide the communities with the long terms benefits such as: ¹Consistent and expedited decision making, ²Improvement transportation option, ³Road Safety, ⁴Community liveability, ⁵Predictability on potential developers.

Davao city has been rapidly urbanizing in the recent years and is expected to experience challenges on mobility and economic development which is dependable on its transportation network. The latter has brought about an upscale volume of vehicles which has resulted in traffic congestion during peak hours. Population and vehicles in the city have been steadily increasing resulting to a negative impact in the city's transportation system, affecting the capacity of the transport network which traffic rule implementation is one of toughest priority and awareness level to people of the city.

Mindanews and Australia Awards report on the Australian government's support towards the development of Davao City's transport plan, or the Comprehensive Transport and Traffic Management Plan (CTTMP). Prioritized on the plan is the implementation of the High Priority Bus System (HPBS) to address the city's traffic woes, and for a "sustainable and seamless mobility" in the city. Also included are strategies addressing community safety, road safety measures, and traffic management. All these considering the future plan for the city by adapting the realization of active transport importance in the infrastructure development and redevelopment.

This research aims to rationalize the public's perception of the city's transport planning and its management, also by gathering their own opinion for the further improvement of the traffic programs that Davaoenos experience.

1.2 Scope and Limitation

This study covered traffic management implementation and enforcement in the downtown area of Davao City. Specifically it is the area bordered by Pichon and Quirino streets from the Bankerohan area, up to where Quirino and C.M. Recto intersects and then extending towards the Southern Philippines Medical Center along which a few more commercial centres stand. The opinions to be gathered are those from commuters, public vehicle drivers, private vehicle drivers, including taxi drivers.

It shall be limited to land transportation vehicles only.

2. Objectives of the study

The study has been under taken with the following objectives:

1. To identify level of public awareness regarding the latest regulation and programs of Transport Planning.
2. To know the effectiveness of traffic rules in terms of its implementation.
3. To determine satisfactory level of approach by the planning programs.
4. To solicit public ideas and recommendations for the improvements of the present and future plan of the City.

3. Methodology

The study employed a quantitative research design. The data collection investigated on the sample through quantifiable data gathering of information solicited from the responders using survey questionnaire.

A sample size was obtained using the Raosoft online sample size calculator. Taken from Davao City's population count in August 2015 of 1.6M people, the calculator yielded a sample size of 385. This figure has a confidence level of 95%, an acceptable margin of error of 5%, and a response distribution of 50%.

The questionnaire inquires on the respondent's awareness on the traffic management strategies such as the loading and unloading areas and road and sidewalk clearing of obstructions. It also asks if the respondent is agreeable to such regulations and then asks for the reason behind their answer.

Google Forms was the main form of the questionnaire used for its convenience, and the approach was interview-based. The researchers would approach a respondent and engage into an interview answering the survey form on a tablet or smartphone when the respondent answered verbally, while recording the narrative responses to the 'why' questions.

Random interviews were executed on qualified respondents in Davao City's People's Park, as well as the sidewalks of major thoroughfares. This was also done in taxi cab queues in G Mall and Abreeza Mall along J.P. Laurel and in SM Mall in Ecoland.

Link to the questionnaire was also sent to some students of the University of Mindanao, office workers, and through Facebook Groups.

4. Results and Discussions

On the Locale

On top of Davao City's implementation of the Comprehensive Transport and Traffic Management Plan is the Davao City Transport and Traffic Management Office.

DCTTMO chief Dionisio Abude said they are now crafting plans on how to mitigate the traffic in the city and propose it to the local government. He added that some motorists illegally park their vehicles, making the lanes narrower thus; there is a high demand for parking spaces.

In traffic operations, motorists were issued citations for violations such as non-wearing of helmets. Motorists that were given tickets for violations including illegal parking and reckless driving, among others, double in number than that of the earlier violators mentioned. In another 3-hour operation three months later, 258 cases of traffic violations were reported. (Saron, 2019)

CTTMO also intensified its apprehension against jaywalkers. This move is to help minimize traffic and accidents while instilling discipline to the Dabawenyos. (Revita, 2019)

The data is presented in four categories such as the level of awareness, rules implementation, future plan, and approach to the program.

Majority of the respondents have been residing in the city for more than a decade. This indicates that the data derived from the results come from a population experienced in the history and succession of leadership of the city.

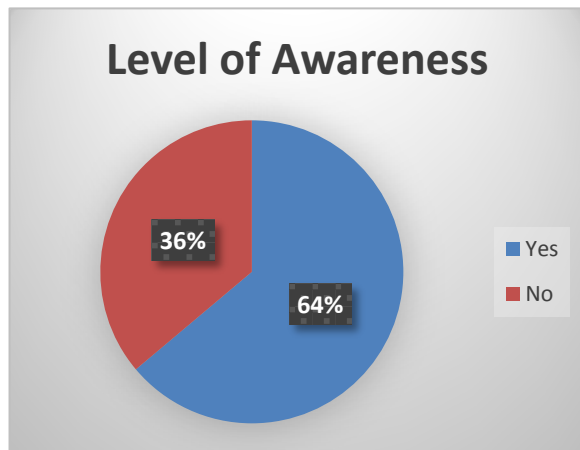
4.1 Awareness

It can be quantified in terms of apprehensions and road signage consciousness of respondents.

Half the number of respondents have been apprehended for certain violations. Obstruction being the most common offense; three quarters of the respondent size are aware of the 20-second rule in the Yellow Box. Close to 90% among the respondents have observed the increase in the number of CTTMO enforcers on the streets and have witnessed sidewalk and road obstruction clearing.

Figure 1 shows the awareness level of the community with the traffic rules being executed by the enforcers in accordance with the existing regulations.

Figure 1. Awareness Level



The chart shows the community being aware of the rules implemented by the local enforcers. Sixty four percent (64 %) of respondents are aware of their violations while 36% was apprehended without knowledge nor was aware of the ordinance violated. Many violators were aware with the prohibitions being implemented yet some of them disregarded the regulations such as overspeeding, obstruction, driving without helmet, jaywalking, illegal parking, beating the readlight.

Respondents opted to disregard the rules on the 20-second rule for the yellow box, when their passenger is a senior citizen who moves very slowly.

4.2 Rules Implementation

This parameter includes traffic rules, sidewalk and road obstruction clearing and traffic management strategy.

Figure 2. Traffic Rules Implemented by enforcers

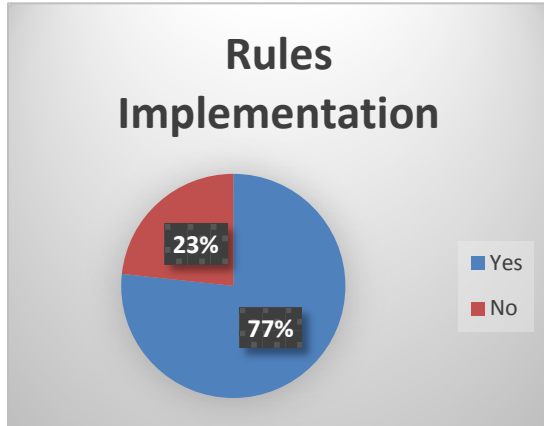


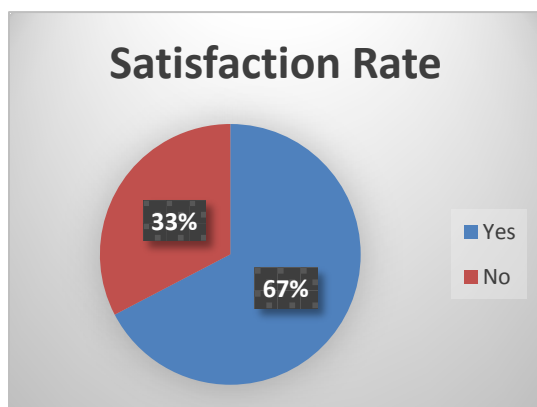
Figure 2 shows that 77% of the respondents agreed that the traffic management strategy of the LGU being implemented is effective and the implementation is one of their priorities. However, adverse reactions to the manner of implementation by the enforcers was not absent during survey interviews. Complaints and issues have been brought about although some reactions were contrary to one rule or another; some of the respondent statements were softened with a declaration of the need to follow the rules.

Some respondents point out that implementation need determination for an effective outcome, and some added that it is the intention behind the action on how the policies are being introduced. Most of the respondents noticed that the implementation of the traffic rules by the CTTMO is on-track and still operative.

CTTMO's effort on road obstruction clearing is very much encouraged by the responders, particularly on illegal parking. The chart above reflects the public opinion that sidewalk and road obstruction clearing is a very effective strategy to improve pedestrian and vehicular mobility. Many respondents claimed that parking and double parking alongside the narrow streets is what causes bottlenecking of vehicles, leading to congestion and delay.

. 4.3 Satisfaction

Figure 3. Satisfaction



The research finds the community being satisfied with action the taken by the LGU to address the increase in vehicular traffic congestion, air and noise pollution, and vehicular accidents. Figure 3 demonstrates 67% satisfaction

rate in the LGU's addressing negative impacts. However, some of respondents haven't noticed the change in the transportation system of the city on addressing the impact.

With close to 90% among the respondents have observed the increase in the number of CTTMO enforcers on the streets. The ratio in the respondent size is close to 50:50, which implies an inclination as to whether or not the number of enforcers is enough. A high ranking CTTMO officer revealed in an interview that the number is indeed insufficient for their charge.

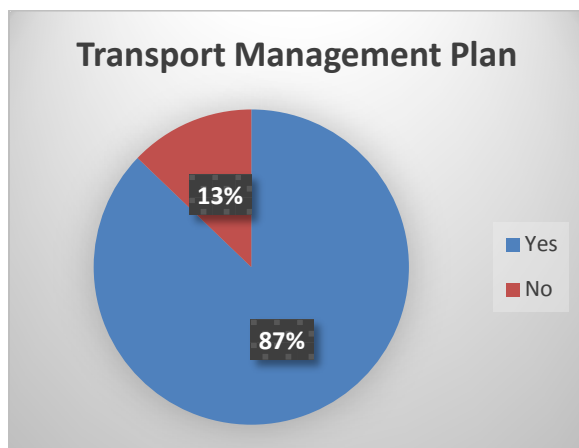
The percentage of respondents claiming that the designated loading and unloading areas is sufficient is over sixty per cent (60%).

Majority agreed that the signage in the city is effective although there are explicit comments that the meaning is not clear in some instances. Also, some respondents observed that the number and location for signage is still insufficient.

4.4 Transport Management Plan

New policies such as “No Parking Space, No New Car Policy” and phasing out of very old vehicles, implementation of the High Priority Bus System and the development of the city's walkability and bikeability and their execution are covered in this section.

Figure 4. Communities' perception for the Future Plan



Proposed programs and policy created by the government is agreed upon by most of the respondents during the survey conducted. Figure 4 shows that programs being proposed by the CTTMO for a sustainable approach of the Transportation Planning System is being supported by Dabawenyos with 87% of the total respondents and justifies that those programs are achievable while minimal perception about 13% stated that programs may not be attained.

Only 15% of the respondent size are not in favor of the “No Parking Space, No New Car Policy” and, the same percentage are not agreeable with phasing –out of old non road-worthy vehicles.

The public is optimistic about the effectivity of the High Priority Bus System, although still partially implemented, in ferrying commuters to their homes as early as they ought to be. 84% of the respondents size agreed to this strategy.

Respondents look into a walkable and bikable Davao City with 96.4 percent agreeing to have bikelanes and improving the city's walkability. Furthermore, it is also noteworthy that many respondents mentioned the provision of facilities and separation of the 2-wheeled motorcycle from the 4-wheeled vehicles.

5. Conclusion

Davao city transportation planning system and management has taken off and being implemented. Although compliance is not a satisfactory high, the community in general is aware of the implementation of the rules and regulations. However there is so much room for improvement in educating the public of the traffic ordinances in the city. The strategies and management as well as its manner of implementation are very satisfactory and acceptable to the general public. Even with a greater support from the city people are the strategies yet to be implemented and developed by the city planners. Issues and challenges are noticed during the engagement of the implementation of policies and programs that is embedded with the transportation planning. However, the city has the capability to control those factors that affect the transport system using the established programs together with the appropriate approach. With this, the future plan for the improvement of transportation planning system for Davao city will improve the sustainability, road safety, flexibility, eco-friendly, economic activity and accessibility for the urban development.

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