UNDERSTANDING THE INFORMAL PUBLIC TRANSPORT PRESENCE ALONG THE MINTAL-TUGBOK-CALINAN ROUTE IN DAVAO CITY, PHILIPPINES: AN EXPLORATORY STUDY

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1. Introduction

Buses and taxis are traditionally part of formal public transport modes seen in most developed countries. On the other hand, in most cities of developing countries like the Philippines, less formal motor vehicle- based public transport modes are also observed. Thus, it is important to understand the presence of informal public transport from a holistic planning perspective noting the role of key stakeholders such as the demand-side or the public transport user, the supply-side (operator-drivers) and the local government. The term "informal public transportation" as a transport service is adopted in this paper. This is based on informal transport, ²⁾ alternative forms of public transport by motor vehicles of paratransit origin and operates in private, small-scale manner, and often lacks the official and necessary credentials.

A wide variation of motor vehicle based public transportation in the forms of public utility jeepneys (PUJs), tricycles (motorcycles with side-cabs), as well as an emerging very informal mode called "habal-habal" (or motorcycle taxis) is commonly found in Davao City. The city being the regional center for Davao Region in Southern Philippines is considered a business, investment and tourism hub. Interestingly, the increasing presence of informal public transport is contrary to the projected transportation system in 1981. The study especially recommended the introduction of city bus by year 2000 given the projected rapid increase in medium term length demand based from survey conducted as well as the development of rail transit.¹⁾

The importance of informal public transport sector has been recognized in many studies. It has also been noted in various policy recommendations.³⁾ Therefore, the need to rationally plan for and regulate transport in order to maximize its inherent economic advantages vis-à-vis formal transport becomes more convincing. Economic advantage in a sense, that it will not need huge investment for infrastructure. The objective is to make do with what is available in terms of providing transport mobility and accessibility as a service. It reality that it provides additional livelihood and employment opportunities for those who are in this sector is also considered. However, there were limited studies on understanding informal public transport in comparison with other modes from a holistic perspective.

This paper aims to provide a holistic planning perspective by trying to understand the role of the different public transport modes among its key stakeholders: the demand, supply, and local government side as well as review past and present national and local policies associated with it.

2. Research Framework, Data Collection and Study Area

In order to have a holistic understanding of the informal public transport service, comparison of the different public transport modes available in the area is made. Key stakeholders that include the local government units, supply (operators/drivers) and the demand or user-side were explored. This is done by studying how the government institution views its existence by reviewing its policies as well as interview with local government officials. In the absence of accurate and complete data in getting operators and drivers' information, an ocular inspection and conduct of public transport operation survey was done in public transport terminals or waiting stops of each mode. Moreover, a middle-class residential area in a baranggay (the smallest local government unit in the Philippines) along the Mintal-Tugbok-Calinan route was selected for the conduct of trip information survey for household members aged 12 years old and above to explore their use of the different public transport modes. Conduct of interview and preliminary surveywas held from January-February 2006. The research framework below summarized the process.

^{*}Keywords: informal public transport, public transport, holistic planning, key stakeholders

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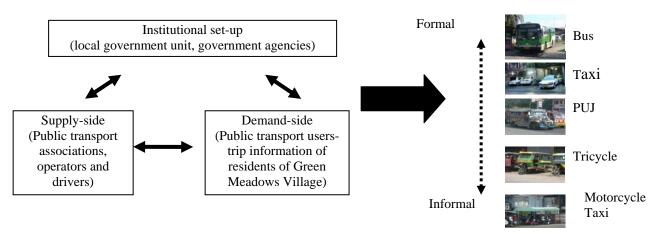


Figure 1. Research Structure

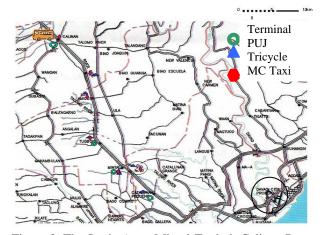


Figure 2. The Study Area: Mintal-Tugbok-Calinan Route

In order to get an understanding of the role of informal public transportation, Mintal-Tugbok-Calinan Center was chosen as the study site since this is the only route where the bus from the city proper plies. This area was part of the spatial development plan that suggest that Calinan be built as the new center for agri-based industrial activities and Mintal-Tugbok area as centre for technology, research and development programs. An ocular inspection of the area verified the presence of buses, taxis, public utility jeepneys (PUJs), tricycles, motorcycle taxis and which is around 30km away from the city center proper. There are two (2) PUJ Terminals (Mintal and Calinan) and one (1) bus terminal. In the entrance of Green Meadows Village, there is a tricycle terminal, motorcycle (MC)taxi waiting stops as well as for taxis.

2. Development Plan and Transport Policies in Davao City

Compared to Manila and other metropolitan cities, Davao City is relatively a young city. Having both urban and rural population tends to encounter problem ranging from lack of transport services to traffic congestion at the central business district (CBD). In urban areas, this is attributed to concentrated population and increasing motor vehicles ownership while in rural areas, the problem is due to poor road condition and road availability⁵⁾.

Road network and highway in Davao City are classified according to the hierarchical level of government maintaining certain roads as follows:

Table 1. Road Hierarchy and Government Agencies-in-Charge

Tuble 1: Road Therareny and Government Tigeneres in Charge					
Road Hierarchy	In Km	Agency in-charge of road maintenance			
National Road	260	Department of Public Works and Highways			
City Road	626	Office of City Engineer (local government unit)			
Baranggay Road	839.7	Baranggay and City government			

Public transport is mainly served by land-based motor vehicles and is classified based on its registration as "for-hire" vehicle at the regional office of Land Transportation Office, Department of Transportation and Communication (DOTC). The Office of Transport Cooperatives, a support office under the DOTC, promotes transport cooperative. Issuance on franchises and other applications for land transport operators as well as fare rates for buses and PUJs are made by the Land Transportation Franchising and Regulatory Board (LTFRB) while for those of tricycles; this is deregulated at the local city LTFRB. Based from interview with LTFRB officials, there was a moratorium on the issuance of public transport franchise since 2002 since the system is being reviewed.

PUS, taxis, shuttle buses, tricycles (interior and minor roads) and regular bus routes are the public transport modes servicing Davao City. Provincial buses are no allowed to operate within the CBD and have to utilize the government operated terminals (Davao City Overland Transport Terminal and Agdao Terminal) and some privately operated ones. There's only one city bus route (Downtown-Calinan) and its terminals are also privately operated. Tricycles and pedicabs only service the interiors of subdivision and minor roads and are banned in traversing along major roads and highways.

3. The Local Public Transport System in Davao City and the study area

The following table shows the public transport system in Davao City which ranges from the formal (buses, taxis, PUJs and tricycles) to the most informal modes ("habal-habal or motorcycle taxis) as well as their average net income per day based from survey conducted.

Table 2. Public Transport Modes from City Proper to Mintal-Tugbok-Calinan and vice-versa

Mode type	Nos.of Passenger	Fare Structure Fare/person/1 st .km	Owner/Association	Drivers/ Operator- driver Members	Ave. estimated daily income (PhP)
Bus	60	PhP7.50+PhP1/500m	Annil Bus Transit	12	608.4
PUJ	14-18	PhP7.00+PhP1/500m	Tagakpan Drivers' Association Calinan Drivers/Operators Association	210	273
Taxi	1-2	PhP25(non-aircon) PhP30 (aircon) +PhP2/200m	Not applicable	Not applicable	225
Tricycles	2-5	PhP5.00 (student) PhP7.00 (adult)	GMSTODA (from survey study area only)	90	295
Habal-habal	2-4	PhP5.00*	Golden Showers Drivers Association SMMPP	65	208

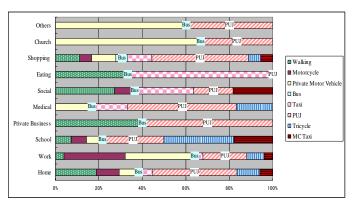
Note: PhP 1.00 = Yen 2.17 * Fare decided by the association

Except for the buses and taxis, which are considered formal modes, the other common feature of PUJs, tricycles and habal-habal is that drivers and or drivers/owners usually group themselves into transport associations. Only those members can use the terminals or stops and they take turns into getting passengers. While bus drivers tend to earn more, more drivers seems to make livelihood with less formal modes and earn almost the same as those in the formal sector having legislated minimum wage of PhP200.

4. The Case of Green Meadows Village, Brgy. Sto.Nino, Davao City

Green Meadows Village is one of the three residential areas found in Brgy. Sto. Niino. It is a privately developed residential area with 1,360 housing units of mostly single-detached houses, of which 60% is estimated occupied by households and belongs to the middle-class income bracket. Household information random preliminary survey show that most belong to the PhP8,001-PhP30,000 income bracket and that 57% of households own a motor vehicle. Trip information survey reveals that 72% of trips were made by public transport.

Figure 2 below shows that PUJs are the most often used public transport mode by residents of the area. Interestingly, for the "to school trip purpose" there's an almost equal modal share of tricycles, PUJs and habal-habal. The latter, the most informal one, is also mostly used for going to school and/or when the purpose is for socializing. It can be inferred by this result that students perhaps have other consideration in choosing the modes they will use for this purpose. Ironically, in all trip purpose, the bus shows a very low trip usage. In this case, it can be assume that from the supply-side there are very few buses (there are only 12 buses for this route) plying in this area. The share of other modes is bigger giving public transport users more options to use in their travels.



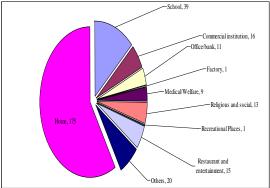


Figure 2. Modal Distribution per Trip Purpose

Figure 3.No. of Trips Made

The findings show that there is obvious demand on less formal modes compare with that of the formal modes. There is obviously strong competition among different public transport mode and to which the concern transport agencies concern must not be overlook.

6. Conclusion

The preliminary findings show that there is obviously a demand on the less formal modes such as PUJs, tricycles and even the motorcycle taxis. The moratorium on the issuance of franchise for public transport in Davao City by LTFRB is also a factor on why informal modes develop. And the public transport suppliers (operators and drivers) are gaining from this in the way that they are getting a means of livelihood. In the future, detailed trip demand analysis at the large scale given the projected development must be done. Moreover, at the supply side, an inventory and cost analysis must be considered and it is only then the appropriate policies can be recommended.

More over, in order to understand the presence of informal transport, it is important to account the role of key stakeholders. At the national and local level, socio-economic and political situation and accompanying policies should be considered. The role it plays that of giving employment and livelihood to the sector must not be overlooked and lastly, at the demand side, it is important to know who are the actual users of each mode and determine where the gap lies.

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References

- Japan International Cooperation Agency: Davao City Urban Transport cum Land use study-Final Report, Vol.1, p.37-42,1981.
- 2) Cervero, R.: Informal Transport in the Developing World, HABITAT, Naorobi, 2000.
- 3) World Bank, Sustainable Transport-Priorities for Policy Reform, Washington D.C.,p. 77, 1996.
- 4) Office of the City Planning and Development Coordinator: Comprehensive Development Plan (1996-2021), Davao City, p.111,2002.
- 5) Office of the City Planning and Development Coordinator: Comprehensive Development Plan (1996-2021), Davao City, p.78-83, 2002.