Analysis of Three Policy Options for a Mass Transport System in Small, Medium and Large-Sized Cities in the Philippines

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Abstract

The study analyzes three (3) policy options for the mass transport systems of three (3) prototype cities in the Philippines representing small, medium and large cities. The policy options evaluated consisted of the Status Quo option (SQ), Government-Owned Transport option (GOT) and Private-Public Partnership (PPP). Using standard methodologies in Policy Impact Evaluation with the Technical-Administrative-Political-Economic criterion dimensions, results revealed that for small sized cities characterized by high political resolve to implement non-traditional solutions to vehicular traffic problems but with limited economic resources, the PPP arrangement is most viable. For medium-sized cities characterized similarly with the same political passion for adopting non-traditional solutions but which are relatively prosperous, the GOT option appears tenable. Large-sized cities wishing to adopt non-traditional solutions with resources to implement such will most likely adopt a PPP approach for political and economic expediency. In all cases, the status quo option was found untenable consistent with the experiences in other countries such as those experienced in Curitiba, Brazil.

Keywords: *mass transport, policy option analysis, TAPE criteria.*

Introduction

The exponential growth in population of urban centers naturally led to serious problems in vehicular traffic management because of the consequent increase in car and motorized vehicles ownership. In 1945, only45% of the world's populations lived in urban centers but it is projected that by 2025, 60% of the population would reside in cities, of which 90% will be in the continents Asia and Africa. (Uzrat, 2007).Closer to home, the traffic congestion problem in Metro-Manila and Metro-Cebu have become so chronic that even palliative remedies such as the number-coding scheme, construction of expensive fly-overs and others had been resorted to. The impact of huge vehicular traffic on the quality of life of people can be enormous: on their health, on the environment and or their general productivity.

Meanwhile, developed and some developing countries have implemented systems that effectively reduce traffic volume by as much as 50% but which are less costly and which derive more social benefit. The world's model for a public transport is found in

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Curitiba, Brazil which adopted a Bus Rapid Transit (BRT) system jointly operated by the government and the private sector. Since its inception in 1943 and subsequent modification in 1967, Curitiba's BRT reduced traffic volume by 50%, improved its ambient air quality through a significant reduction in carbon dioxide emission and unburnt fuel from motorized vehicles, and also resulted in cutting transportation costs to less than 10% for the average Curitibano. In the United States, ten (10) cities were recently cited for their government-operated bus transport systems which, overall, reduced vehicular traffic in these cities by as much as 40%. (ITDP, 2008)

In the Philippines public transport systems are, for all practical purposes, privately-owned. The economic incentive for operating public transport systems have fueled a transport economy characterized by an even-increasing number of fuel-inefficient motor vehicles plying the city routes. Over a ten-year period from 2000 to 2010, the number of registered public utility vehicles (PUV's) increased by an average of 11.75% (12%) per annum in Metro-Manila alone (LTFB Statistics, 2011) of course, the results are predictable: heavy traffic congestion and worsened air quality in Metro-Manila. This experience is repeated in most of the countries' major cities as well. The knee-jerk reaction of local government officials in these cities is to build fly-overs or embark on expensive transport projects which solve present problems but eventually became ineffective and unsustainable.

The present study analyzes the viability of three (3) policy options for a public transport system: status quo, government-operated public transport, and private-public sector partnership, for small and medium-sized cities in the Philippines. The approach used is through a projected Regulatory Impact Analysis (PRIA) where the concerns of stakeholders are inputted in the policy option evaluation criteria. The cities analyzed are Tangub City, Dipolog City and Cebu City representing the small, medium-sized and large-sized cities, respectively.

Research Design and Methods

We identified the major stakeholders relative to the issue of a public transport system for each of the cities identified. The stakeholders were: the riding public, the private operators, the local politicians, and the line-government agencies in the cities. The purpose in doing this was to elicit the major concern of the affected stakeholders and, thus, properly define the problem and the evaluation parameters for the policy options. Fifty (50) respondents from each of the stakeholders' group were considered. Focus-group discussions (FGD) were then led by especially-trained data collectors for the purpose. A copy of the structured-interview guide is provided in the Appendix. Secondary statistical data, such as population census, number of registered public utility vehicles, and others were likewise collected for the period 2000-2010.

The responses gathered from the structured interviews and FGD's were further categorized into concerns about the: Technical, Administrative, Political and Economic Dimensions following the table for policy analysis by Dye et al. (2007):

Technical Dimension. The technical dimension refers to indicators of efficiency, effectiveness and equity.

- $Efficiency = \dfrac{(average\ daily\ passenger/PUV under\ option)\ x\ (number\ of\ PUV's\ under\ an\ option)}{Total\ Population\ Over\ Age\ 12}$

- $Effectiveness = \dfrac{current\ Number\ of\ PUV's\ SQ - Number\ of\ PUV's under\ a\ Policy\ Option}{number\ of\ PUV's\ under\ SQ}$

- $Equity = Percentage\ of\ riding\ public\ agreeing\ with\ the\ policy\ option.$

Administrative. The administrative dimension refers to the ease with which a policy options can be implemented: Administrative ease is measured by:

- $\dfrac{Reduction\ In\ Traffic\ Enforcers}{(RITE)} = \dfrac{no.of\ traffic\ enforces\ under\ a\ policy\ option}{no.of\ traffic\ enforces\ under\ status\ quo}$

- $\dfrac{Reduction\ In\ Volume\ of\ Franchises}{(RVF)} = \dfrac{no.of\ franchises\ to\ be\ issued\ under\ a\ policy\ option}{no.of\ franchises\ to\ be\ issued\ under\ status\ quo}$

Political. The political dimension refers to the level of acceptability of a policy option which in turn translates into "votes" for political champions of the options.

- $\begin{array}{c} Percentage\ of\ affected\ stakeholders\ In\\ Agreement\ with\ the\ Political\\ Leadership\ On\ a\ Policy\ Option\\ (Political\ Parity\ Index)PPI \end{array} = \dfrac{\begin{array}{c}Number\ of\ affected\ respondents\ with\ same\ option\\ as\ the\ political\ leader\end{array}}{Total\ number\ of\ affected\ respondents}$

- $\begin{array}{c} Percentage\ of\ stakeholders\\ Agreeing\ with\ a\ policy\ option\\ (Option\ Parity\ Index)OPI \end{array} = \dfrac{Number\ of\ respondent\ preferring\ the\ option}{Total\ number\ of\ respondents}$

Economic. The economic dimension refers to the financial capabilities and/or incapabilities of stakeholders under a policy option:

- $\begin{array}{c} Ability\ to\ put\ up\ the\ infrastructure\\ Supportful\ needed\ for\ the\ option\\ (ISF) \end{array} = 1 - \dfrac{financial\ requirement\ for\ the\ option}{\begin{array}{c}appropriations\ for\ public\ transport\ operaton\\ and/or\ road\end{array}}$

- $\dfrac{Net\ Revenue}{(NR)} = \dfrac{Proj.Revenue\ from\ Option - Proj.Revenue\ from\ Status\ quo}{Proj.Revenue\ from\ option}$

- $\begin{array}{c} Ability\ to\ Support\ Maintenace\ of\ the\ option\\ (IMF) \end{array} = 1\text{-}\ (MOOE\ for\ option/MOOE\ appropriation)$

The financial requirements for a policy option were estimated by an expert economic planning specialist and a civil engineer requested by the first author for this purpose. The tabular output for the analysis is shown below:

Table 1   Summary Table for the Policy Option Analysis

Evaluation Criteria	Weights	Presence/Absence Criterion	Policy Score Calculation	Policy Option Scores		
				SQ	GOT	PPOT
A. Technical	25%					
Efficiency		1, if greater than 50%	$score$			
Effectiveness		1, if greater than 25%	$= \dfrac{\# \; of \; 1's}{3} x25\%$			
Equity		1, if greater than 50%				
B. Administrative	25%					
RITE		1, if greater than 50%	$score$			
RUF		1, if greater than 50%	$= \dfrac{\# \; of \; 1's}{2} x25\%$			
C. Political	25%					
PPI		1, if greater than 75%	$score$			
OPI		1, if greater than 75%	$= \dfrac{\# \; of \; 1's}{2} x25\%$			
D. Economic	25%					
ISF		1, if greater than 90%	$score$			
NR		1, if positive	$= \dfrac{\# \; of \; 1's}{3} x25\%$			
IMF		1, if greater than 90%				
Total	100%		Sum of Score = ss			

A policy option is deemed "acceptable" if the total score (ss) of the option exceeds 60%.

Certain assumptions were made in the computation of the indices. These assumptions, as explicitly spelled out in the computation matrices are:

A1: Only 50% of the riding public ride on a daily basis at any given point in time;

A2: Reduction in the existing number of PUV's is expected under both the GOT and PPT;

A3: One (1) GOT or PPT vehicle equals seven(7) motorelas;

A4: The difference between the current appropriations for public transport operation and/or road maintenance and the financial requirements for an option represents the ability of the city to put the infrastructure support for the option (ISF);

A5: The growth in the number of riding public per city is proportional to the general population growth rate of that city.

The computed indices per evaluation dimension were converted into 0 or 1 according to the rule:

Rule = 1, if the computed index exceeds a certain value;
        = 0, otherwise

The cut-off values were arbitrarily chosen based on the author's readings and experience.

The four (4) evaluation dimensions were equally weighted (at 25% each). The weighted score of a particular option is obtained by multiplying the proportion of 1's observed in the various indicators for that dimension to .25

Weighted score for a dimension = (# of 1's/no. of indices) x .25.

The total score for the option was then obtained by adding all the dimension scores.

Sensitivity Analysis

Sensitivity analysis or "what if" analysis will be done on the various options to ascertain what options relative to the public transport problem will be most likely in the future. The context-based forecasting approach, otherwise known as Scenario Building approach, was used in this particular study. In this approach, a jury of experts is asked to identify the two most important factors that would shape the decisions of public transport policy makers in the future. On the basis of these two factors, four (4) scenarios are built. The most likely scenario is determined based on the demographic characteristics of the three (3) cities under consideration.

Results and Discussions

Tangub City. Tangub City, known as the "Christmas Symbols Capital of the Philippines" is located in the southern part of Misamis Occidental, bounded by the municipality of Bonifacio in the south and Ozamiz City in the north. Its name is derived from a Subanon term, "tangkob" which means a basket made of the tree bark used for storing rice. The Subanon tribe is the first inhabitant of the place. It became a city on June 17. 1967 and was envisioned to become the agri-business and learning center of Panguil Bay Sub-Region. It is composed of 55 barangays; has the total land area of 16,572 hectares and a population of 52,697 (2009); Adjudged as the Cleanest City in the Philippines (1969) and Best in Urban Planning (1970).

As of the moment, the best policy option for Tangub is to adopt a public-private sector partnership although the purely government-operated set up comes second. Both the GOT and PPP options are found to be technically feasible (rating: 16.67%), in general. However, the PPP option is noted to be more effective in terms of reducing the number of vehicles that will ply the city routes of Tangub. The GOT option is unable to do this because in practice, the number of vehicles that are operated by the government

run in addition to the existing number of vehicles that are already catering to the transport needs of the city. As to be expected, when the GOT option is presented to the stakeholders, the option was found to be the most equitable alternative.

Table 1 shows the policy option analysis for the City of Tangub. A copy of the numerical calculations is found in Appendix I:

Evaluation Criteria	Weights	SQ	GOT	PPP
A. Technical	25%	8.33%	16.67%	16.67%
Efficiency		1	1	1
Effectiveness		0	0	1
Equity		0	1	0
B. Administrative	25%	0.0%	0.0%	12.5%
RITE		0	0	0
RVF		0	0	1
C. Political	25%	12.5%	12.5%	12.5%
PPI		0	0	1
OPI		1	1	0
D. Economic	25%	16.75%	25%	25%
ISF		1	1	1
NR		0	1	1
IMF		1	1	1
Total		37.58%	54.17%	66.67%

Administrative convenience as defined consists of two key evaluation parameters: reduction in the number of traffic enforcers and volume of franchises to be issued. Surprisingly, all options did not result in any reduction in the number of traffic enforcers. This can be explained by the fact that the traffic enforcers are regular plantilla holders in government service and their number cannot be reduced even if the number of vehicles that ply the city routes is reduced. Nonetheless, it is under the PPP that a serious reduction in the volume of franchises is observed. The PPP option, therefore, leads to greater administrative ease.

Politically, the GOT option finds no support from the stakeholders but the PPP option does (Political Parity Index is zero for GOT but one for PPP). On the other hand, the GOT option is an option that appears to be within the limits of consideration of the stakeholders provided that the number of vehicles is indeed not reduced (Option Parity Index is one for GOT but zero for PPP). However, since the PPP requires a drastic reduction in the number of vehicles, the Option Parity Index for PPP is zero. In sum, both the GOT and the PPP options have the same or equal political acceptability to the stakeholders in Tangub City.

Finally, in terms of economic feasibility, the three (3) key indicators: ISF, NR and IMF, were found positive for both the GOT and the PPP options. Expectedly, the SQ (status quo) option did not yield any net revenue for the government.

We note in passing that of the three (3) policy options available: SQ, GOT and PPP, the status quo option (SQ) is found to be the least desirable. The City of Tangub will therefore benefit most by exploring areas where either the GOT or PPP options are operant.

Dipolog City. Dipolog City is a third class city and the capital of the province of Zamboanga del Norte. It became a chartered city on January 1, 1970. It is bounded on the east by the municipality of Polanco, on the south and east by the municipality of Katipunan and on the north by Dapitan City. The city has an area of 136.28 sq. km and a population of 120,460 as of 2010 census or a population density of 11,641/sq km. The city is composed of 21 barangays. Due to its rich fishing industry, Dipolog came to be known as the Bottled Sardines Capital of the Philippines. It is likewise known as the "Gateway to Western Mindanao "through the Western Nautical Highway (Wikepedia).

Several modes of transportation ply the streets of Dipolog. A giant bus company with several stations all over Mindanao and Visayas has one of its stations in Dipolog. Around the city jeepneys that have routes around the city and its suburbs. Motorelas (motorcycles fitted with cabs) is the other means of transportation around the city. Feeder roads coming from interior of the city the going to the main thoroughfares are serviced by foot pedaled" trisikad".

Table 2 shows the policy options analysis for the City of Dipolog. A copy of the numerical results is found in Appendix II:

Table 2   Policy Option Analysis for Dipolog City

Evaluation Criteria	Weights	SQ	GOT	PPP
A. Technical	25%	8.33%	16.67%	16.67%
Efficiency		1	1	1
Effectiveness		0	0	1
Equity		0	1	0
B. Administrative	25%	0.0%	0.0%	12.5%
RITE		0	0	0
RVF		0	0	1
C. Political	25%	12.5%	12.5%	12.5%
PPI		0	0	1
OPI		1	1	0
D. Economic	25%	16.75%	25%	25%
ISF		1	1	1
NR		0	1	1
IMF		1	1	1
Total		37.58%	54.17%	66.67%

In the case of Dipolog, results of the study show that the three options (SQ, GOT, and PPP) are feasible. However, the best policy option is either to adopt a government-

operated transport system or a public-private partnership as both options have the same rating: 16.67%. Specifically, it is efficient in the sense that more than 50% of the average daily passenger aged 12 years old and above is served. Moreover, in terms of effectiveness, data show that it is only in PPP that the number of transportations operating is reduced.   As to equitability, policy option analyses point out that only GOT is technically impartial and found acceptable; this means that the public agrees with the option.

Administrative ease is defined by two indicators: reduction in the number of traffic enforcers and the volume of franchises to be issued. The study reveals that that none of the options can be implemented since traffic enforcers are employees paid by the city government. Their number cannot be reduced even if the number of transportation that operates in the city has increased or decreased. In effect, it is saying that the number of traffic enforcers cannot be reduced since their service is independent of the number of vehicles operating in the city. As an afterthought, it can be noted that it is only through PPP that the volume of franchise can be reduced.

Politicians in Dipolog look at public-private partnership and GOT as feasible. The people have a different view, however. They consider only the GOT as acceptable. This means that should the local leadership push through with implementation of the PPP option, it is very likely that they will not get the support of the people.

Economically, all three options are acceptable. This means that the local government allocates infrastructure support fund (ISF) from its monitoring and other operation expenses (MOOE). Likewise, the government also allocates an amount for maintenance of transportation from its total budget for the city. Logically, this option also indicates that the government does not generate any net revenue from the operation of the existing mode of transportation facilities.

Cebu City. Cebu City is a first class and highly urbanized city located on the eastern shore of the province of Cebu and was the first Spanish settlement in the Philippines. It became a chartered city on February 24, 1937 during the Commonwealth Era (1935-1946). It has an area of 315.0 s km and a population of 866,171 or a population density of 2,700/sq km. Cebu is the Philippine's main domestic shipping port and is home to about 80% of the country's domestic shipping companies. It also holds the second largest international flights in the Philippines and is a significant center of commerce, trade and industry in the Visayas and Mindanao regions. Among the many names given to Cebu City, the most popular is the "Queen City of the South."

Cebu City is the center of metropolitan area called Metro Cebu, which includes the cities of Carcar, Danao, Lapu-lapu and Mandaue, Naga, Talisay. Metro Cebu has a total population of about 2 million people. The Mactan-Cebu International Airport, located in Lapu-Lapu City is only a twenty-minute drive away from Cebu City.

Mass transportation throughout the city and the metropolitan is provided by jeepneys, buses and taxis. The city government conducted a study to implement a bus rapid

transport system that will make travel more convenient around the city and the neighboring cities. The project's first phase is expected to operate in 2013, and the remaining phase in 2015. The network will pass Cebu Business Park, North Reclamation Area, South Road properties, and Mactan-Cebu International Airport.

Table 3 shows the policy option analysis for the City of Cebu. A copy of the numerical results is found in Appendix III:

Evaluation Criteria	Weights	SQ	GOT	PPP
A. Technical	25%	8.33%	16.67%	16.67%
Efficiency		1	1	1
Effectiveness		0	0	1
Equity		0	1	0
B. Administrative	25%	0.0%	0.0%	12.5%
RITE		0	0	0
RVF		0	0	1
C. Political	25%	0.0%	0.0%	12.5%
PPI		0	0	1
OPI		0	0	0
D. Economic	25%	16.75%	25%	25%
ISF		1	1	1
NR		0	1	1
IMF		1	1	1
Total		25.0%	41.67%	66.67%

Technically, results in Cebu City reveal that SQ, GOT and PPP options are all feasible, which is similar with the two other cities, Tangub and Dipolog. This means that should the government adopt any of these options, it is able to service more than 50% of the riding public aged 12 years old and above.   However, it is not effective in reducing the number of public transportation operating under both the SQ and GOT; it is effective only in PPP. This implies that only public private partnership option is technically acceptable. However, of the three options, GOT is found to be more equitably acceptable to the stakeholders.

Administratively, similar to the two other cities, none of the options is able to reduce the number of traffic enforcers. The public private partnership as the data show, is likely more able to reduce the volume of franchises.

Politically, respondents believe that only public private partnership is acceptable. None among the three options is acceptable to the rest of the respondents. This implies that if the local leadership chooses to implement any of the options, they people will not likely support the program.

Economically, all the options are acceptable. This means that the city government has allocated an amount for public transportation from the total amount available for

transportation. Like the two previous cities, the city government derives no net revenue from the SQ option. From the city's total budget, the city government has set aside an amount for maintenance of transportation.

Synthesis

To sum up, there are parallels in the choice of option for the three cities.   To illustrate this point, a table below runs across the findings in the three locales:

Table 4   Comparative Analysis

Evaluation Criteria	Tangub City			Dipolog City			Cebu City		
	SQ	GOT	PPP	SQ	GOT	PPP	SQ	GOT	PPP
1. Technical	8.33	16.67	16.67	8.33	16.67	16.67	8.33	16.67	16.67
2. Administrative	12.50			12.50			12.50		
3. Political	12.50	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
4. Economic	16.75	25.0	25.0	16.75	25.0	25.0	16.75	25.0	25.0
TOTAL	**37.58**	**54.17**	**66.67**	**37.58**	**54.17**	**66.67**	**25.0**	**41.67**	**66.67**

Firstly, SQ as an option is definitely not acceptable among the three cities with Cebu registering the lowest among the three (25.0%)   This implies that as a policy, the existing transportation operation is not feasible as management and ownership is within the hands of private individuals. The government has no control whatsoever in this option.

Secondly, on the contrary, PPP is popular among them (all registered a score of 66.67%).   GOT is slightly acceptable for both Tangub City and Dipolog City (54.17%).

Thirdly, the three cities view all options as technically viable.   Furthermore, city governments employ personnel to oversee traffic control as part of peace and order maintenance. Hence, their presence in no way affects the volume of vehicular franchises that operate in the city.

Lastly, as a corporate entity, it is mandated for city governments to allocate fund for transportation maintenance and infrastructure support in its monitoring, operation and other expenditures.   Transportation is one of the major utilities that keep the city operation vibrant.   Understandably, this explains the economic viability of the three options.

Sensitivity Analysis

Sensitivity analysis or what is often referred to as a "what if" analysis is a technique for ascertaining the possible scenarios if certain changes in the input parameters are made. It is an important part of research studies involving policies since it enables policy

makers to make intelligent decisions guided by the outcomes or possible scenarios in the future.

Scenario Building

Of the four (4) evaluation dimensions of the evaluation criteria, we consulted a jury of experts to choose the two (2) most important determinants that eventually dictate the policy options to take. The jury of experts consisted of the three (3) city mayors (from the LGU side), and three (3) academic experts with Ph.D.'s in planning and management or related disciplines viz. sociology or population dynamics. The jury of experts chose the following important determinants:

Horizontal Determinant: Economic Dimension

Vertical Determinant: Political Dimension

Following standard scenario building methodologies, we dichotomized the horizontal and vertical determinants into High (+) and Low (-).
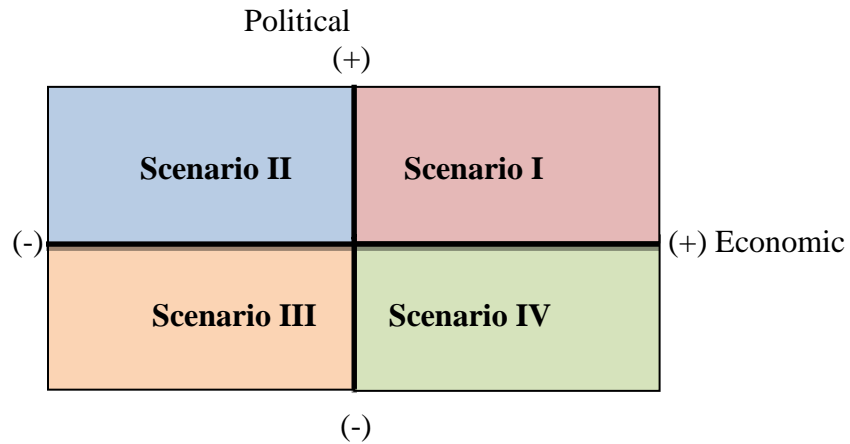

Figure 1   Four (4) Scenarios Along the Economic-Political Dimensions

High Economic conditions will happen when the country, in general, experiences greater economic productivity as measured by the Gross National Product per capita; Low Economic conditions will prevail when the reverse is true. On the other hand, High Political conditions occur when the political leadership at that point in time will seek to deviate from traditional solutions to an increasing volume of vehicular traffic e.g. flyovers, massive infrastructure etc.; Low Political conditions will exist when the political leadership still continues to rely on traditional solutions to the problem. With these understanding, we describe the four (4) possible scenarios as follows:

Scenario 1: High Economic-High Political Conditions. This is the scenario when the local economic conditions of the particular city is positive (where the incidence of poverty is low and the per capita Regional Gross Domestic Product is high) and the

political climate is favorable to non-traditional solutions to the problem of coping with the volume of vehicular traffic.

Scenario 2: Low Economic –High Political Conditions. This is the scenario where the economic conditions of the particular city is negative but the political climate favors non-traditional solutions to the problem of coping with the volume of vehicular traffic.

Scenario 3: Low Economic – Low Political Conditions. This is the scenario where the economic conditions of the particular city is negative and the political climate favors only traditional solutions to the problem of coping with the volume of vehicular traffic.

Scenario 4: High Economic-Low Political Conditions. This is the scenario where the city experiences positive economic conditions but the political climate still favors traditional methods for coping with the volume of vehicular traffic in the city.

One of these scenarios will prevail in the future for each of the cities analyzed in this particular study.

The Tangub City Scenario. The Local Governance Performance Management System (LGPMS,2009) reports that Tangub City is a third class city (although considered 4th class in terms of income) covering a land area of over 16,000 hectares for a population of over 56,000 in 2009. Population growth rate is estimated at 1.67% per annum with farming and fishing as the main livelihoods. Poverty incidence was estimated in 2011 by NSCB at 37.1% up from previous census surveys by almost 3-percentage points. Per capita income of households was also found to be low. In the province of Misamis Occidental, however, Tangub City was found to have the least poverty incidence along with the capital city of Oroquieta. The local government of Tangub intends to pursue more vigorous projects along the lines of Ecotourism and power generation. Given the trends in both per capita income and poverty incidence in the City, we estimate that the City will be in the **middle-low Economic Scale** on the horizontal dimension in the next ten years.

In terms of the political dimension, historical data appear to support a political leadership that favors non-traditional solutions to public transport system in the City (LGU Report 2009; current interview with City Mayor Tan, 2012). We therefore surmise that the most likely scenario for Tangub City is **Scenario II (Low Economic-High Political Conditions).** Unique to Tangub is the influence of politicians through role modeling.

With low per capita income, the population will most likely opt for cheaper means of transportation that will be least affected by the unstable oil prices. The general riding public will become more open to a Government-Owned Transportation system (GOT) as in the case of Libot Tangub. However, the economic crunch which will be experienced by the riding public will also be similarly felt by the local government unit (LGU) in the long run. The LGU will, therefore, seek private sector participation in this regard so that a PPT arrangement is the most likely option that this city will consider in the future.

The Dipolog City Scenario. Dipolog City is a third class city and the capital of the province of Zamboanga del Norte. Its population in 2010 is pegged at 120, 460 spread over an area of 136.28 sq km or roughly a population density of 88.91/sq km. Dipolog is known for its orchids and sardine industry which stems from the rich fishing area off its shores.

In 2006, a study by the National Statistics Coordination Board (NSCB) found Dipolog City to be the wealthiest city per capita in the Zamboanga Peninsula. Within Dipolog, 23.15% of the population was estimated to be living below the poverty line. However, Dipolog City is the wealthiest city per capita in the Zamboanga Peninsula as against Zamboanga City and Pagadian City (NCSB 2006).

The foregoing situation places Dipolog in middle **high economic scale** which will place the city in the middle-high Scenario I in the next ten years. With a high per capita income, Dipolog will go for either PPT or GOT, but in ten years' time, with the political stand of its leaders, it will definitely go for GOT.

In terms of political dimension, Dipolog has high middle income and more educated class that favor the non-traditional solutions to public transport system in the city. Thus, we foresee that the most likely scenario for Dipolog is Scenario I (High Political-High Economic condition). These conditions are ripe for either a GOT or a PPP. With the local government unit experiencing relative prosperity and a political leadership that believes in non-traditional solution to the vehicular traffic problem, the GOT option will be more likely resorted to i.e. there is little motivation to seek private sector participation on this regard. Therefore, in ten years' time, the LGU will still opt for GOT because other than they can do it, its political leaders believe in it.

The Cebu City Scenario. Dubbed as the Queen City of the South, this first class city is peopled by 866,171 Cebuanos. Its area is 315.0 sq km which roughly places its density at 2,700/km. Cebu City is considered as one of the most progressive cities in the Philippines. About 80 per cent of the island vessels operating in the country are based in Cebu City. Cebu also holds the second largest international flights in the Philippines and is a significant centre of commerce, trade and industry in the Visayas and Mindanao regions.

Cebu City's political dimension has political rival faction with the stronger faction more likely to pursue non-traditional solution to the mass transport system in the city. In particular, the stronger faction manifests interest on the application of a PPT in the City through their published experiences with Trans Millenio in Bogota. Thus we project that the most likely scenario for Cebu City is Scenario I (High Political – High Economic Condition). Therefore in ten years' time, the LGU will more likely go for PPT since its leaders advocate the option even if they have the financial capability for any other option.

Conclusions

The riding public, in general, desires an alternative to the current mass transport system (SQ) which it finds to be inadequate and wanting. This desire appears to be an

offshoot of the increasing population and the consequent need for greater and faster mobility of the general population in their day to day activities. Alternatives to the status quo (SQ) are mainly functions of the Political Leadership and Economic Stability. Government-Owned Transport Systems (GOT) finds favor in locations where the Political leadership bend towards non-traditional solutions (viz. away from traditional solutions such as building fly-overs) and where the economic resources are sufficient to absorb the subsidy needed for such an arrangement (e.g. Dipolog City). On the other hand, Private-Public Sector Partnership (PPT) is a most likely option for cities where the Political Leadership similarly hold non-traditional views on solving the mass transport problem and where the economy is relatively robust such that displacement of privately-owned public utility vehicles is not seen as a political threat (e.g. Cebu City) or when the general economic situation of the city is unable to subsidize the operation of a mass transport system (e.g. Tangub).

The size of the cities (small, medium or large) is not a determinant of the optimal policy option for a mass transport system in the Philippines. Instead, in countries where politics is a way of life and where poverty incidence is high, the policy options appear to be mainly dictated by the Political Leadership and by Economic considerations.

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