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**Transition of Heritage Trishaw (*Beca*) as a Mode of Public
Transport: Its Influence Towards Heritage Value and
Tourism Industry in George Town World Heritage Site
(GTWHS)**

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Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Transport and City Planning at University College London: I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

Word count: 9,030

Acknowledgement

I wish to thank my family and friends for endless support, encouragement, and prayers throughout my journey. Thank you for being inspiring.

I would specially like to thank Dr Astrid Wood for her supervision of this dissertation despite having pandemic going on. Thank you for being helpful and supportive.

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List of abbreviations

GIS	Geographic Information System
GTWHI	George Town World Heritage Incorporated
GTWHS	George Town World Heritage Site
NGO	Non-Government Organisation
OUV	Outstanding Universal Value
PRT	Passenger Road Transport
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WHS	World Heritage Site

Abstract

The role of heritage trishaw (*beca*) as an informal transport in George Town World Heritage Site (GTWHS) is shifting from a main public transport for the local community to leisure transport for tourist. Nevertheless, after more than a decade, the city has been declared as the World Heritage Site by UNESCO, there is a need to clarify the users' desire regarding the *beca* service. This study aims to gauge user's perspectives on *beca* service dependency to understand its potential in the hierarchical classification as an informal public transport in GTWHS. Mix-methodology were adopted in this study combining quantitative method on an online questionnaire survey with qualitative methods of interview and Geographic Information System (GIS) application.

The findings indicate that the *beca* service was highly demanded among tourists who want to experience the local atmosphere of GTWHS and the authenticity of heritage buildings. The WHS title has severely increased the number of tourists visiting GTWHS and simultaneously expended functionality of the *beca* service as one of the seek-after modes of mobility. This is supported by the GIS analysis mapping which reveals that all *beca* routes are found buffering within 400-meter from the Category I buildings, connecting the *beca* users and the existing local heritage closely. Additionally, tourists were thrilled to experience *beca* riding despite it is an old-fashioned vehicle and having to move in a slow-paced journey in the blazing hot weather. In conclusion, the role of *beca* in contributing to the heritage value and tourism industry of GTWHS is undeniably important. Hence, the policymakers and stakeholders must work together to enhance the quality of *beca* service while conserving the identity of *beca* as a hallmark of GTWHS and publicised it as a must-to-do activity for the locals and tourists who wants to experience GTWHS in a full sense.

1.0 Introduction

1.1 The George Town World Heritage Site (GTWHS)

George Town is situated in northern Malaysia on the northeast corner of Penang Island, state of Penang (Pulau Pinang in Malay) (see Figure 1). The British East India Company took ownership of the island from Sultan Kedah in 1786 and a colonial trading centre was built. Since then the township has grown from a free-trade port to a lively and diverse heritage enclave. After World War II, the position of George Town as a trading port was slowly diminished as new manufacturing and residential estates were developed in neighbouring districts. A Rent Control Act was passed in 1966 which ultimately suspended rents until 2000. During this time, the landowners were hesitant to pay on building maintenance (IGeorgetown, 2013) to the extent of endangering some buildings' integrity. But in some cases, it is a blessing in disguise, as it has managed to preserve its basic shape, retaining their authenticity, architectural with its original community, traditional trades and cultural practices.

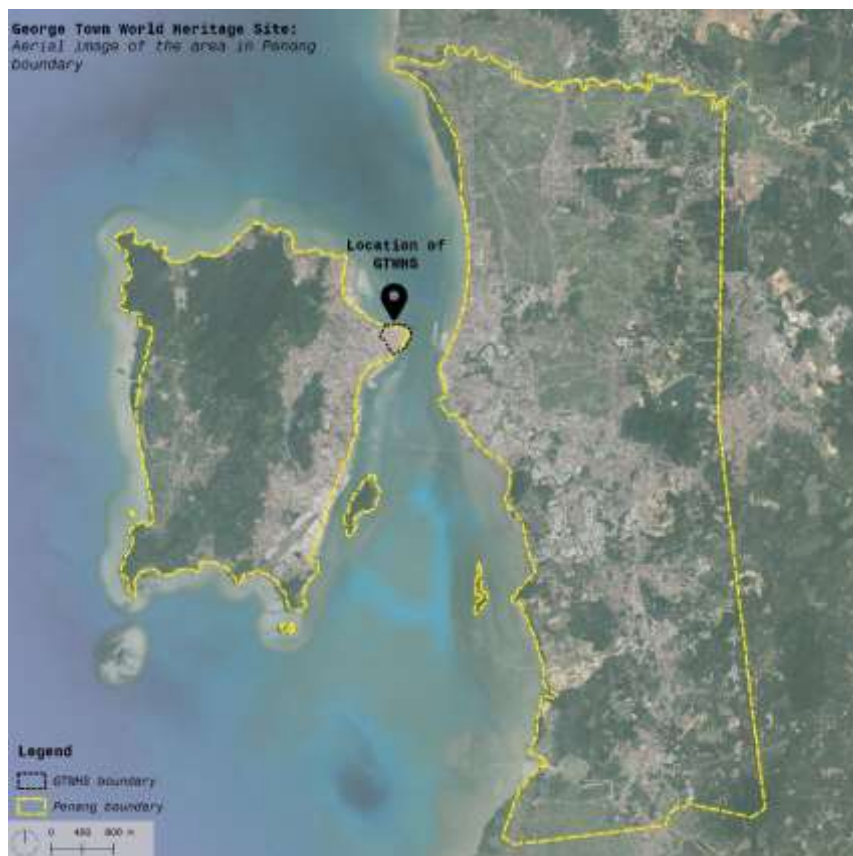


Figure 1: Location of GTWHS in Penang map

In July 2008, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) designated an area of 260 hectares in the inner-city of George Town (see Figure 2) together with the inner-city of Melaka (another state in the southern part of peninsular Malaysia) as a jointly inscribed World Heritage Sites (WHS), making them as first two cities in Malaysia recognised with this title.



Figure 2: 260 hectares of George Town World Heritage Site

The rationale of the joint inscription is marked by the emergence of the requisite elements to articulate Outstanding Universal Value (OUV) in both cities. The inner-city of George Town and Melaka have exhibit unique cultural or natural value that embodies national boundaries to both humanity's present and future generations. The properties in the inner cities have maintained their authenticity in which the monuments and sites have been restored in compliance with conservation standards and values, with adequate treatments of architecture, materials, methodologies techniques and workmanship.

Additionally, GWTHS is situated in the central part of Penang Island where the industrial, administrative and heritage buildings and religious ceremonies converge. This location of

GTWHS is an advantage since the city centre represents the social background of the cities because of the diversity of people in diverse places, such as commerce, homes, entertainment and a range of residents, administrative and professional resources. Beyond simply serving as a location for people to live, the urban centre is known as a desirable area in communities where people walk, learn, interact, have fun, shop and in general, participate in various social and entertainment programs. As the programmes are some of the pleasant facets of urban living, these practices affect the sense of quality of life for many urban tourists and communities in the historical areas of GTWHS.

1.2 The Heritage Trishaw Called *Beca*

Heritage trishaw or known as *beca* is an informal public transport in GTWHS used to be the main mode of transport among local people for over 80 years, historically used to take children to and from school, women to the shop, men to work and families to their favourite cafe. Nowadays, *beca* is no longer used by the local but mainly used by tourists, due to several factors. One of them is because of the transition of the city from a balance live-work-play area for the local community to a more commercialised city with more tourists from day to day after the inscription of the WHS status. Furthermore, people would prefer to choose another mode of transportation such as a car, taxi or motorcycle which is more comfortable, convenient, faster, and sometimes even cheaper.

However, from the tourism viewpoint, the majority of the *beca* pullers are good storytellers. They can narrate to their passengers in their own way about the stories of each area they passed through. Although most of them are old and their movements are slow, they are more flexible to accommodate any trail chosen by the users upon requests depending on the packages offered, due to their experience and familiarity with the area. In fact, their talent of telling the stories and flexibility may boost the quality users' experience during their trip within GTWHS for both locals and tourists.

1.3 Research Scope and Intention

The study will identify how far *beca* is being used nowadays and how its functionality has transformed. The rationale and opinions about the service and experience by the users are one of the many interesting findings to evaluate the significance of operation and its relevance. Through this, this study discovers the factors that justify people's needs, demands and satisfaction of the existing service. In addition, the kind of improvements that can be done in

response to the user's preference and potential action that can be taken by related stakeholders will be discussed.

The most general misconception is that reliance on public transport in developing countries on an informal transport mode is due to the lack of modal choice. The theory of rational action is normally the conventional and scientific framework commonly used by most transport planners to describe this situation. The definition of reliance on public transport using rational and subjective indicators has never been thoroughly discussed and pursued, mostly in the various kinds of informal modes of public transport case found in many emerging developing cities. Thereby, the study inspired from the desire to understand what actually pushes people to use informal public transport modes and the need to prepare for it rationally, and control it in order to optimise its intrinsic psychosocial and economic benefits and other relevant issues.

2.0 Literature Review

2.1 Informal transport then, now and in the future

2.1.1 Informal transport as a public transport mode

The worldwide public transport system includes formal and informal transport. It was found primarily on the plurality of the service in the local area as well as on some particular location and regional area. The term informal public is used to refer to collective passenger road transport (PRT) with little to no regulation over its services by an ultimate regulatory authority. Furthermore, it is generally distinguished by an unplanned and ad-hoc service request, inadequate and no regard for routes and not fixed or reported fare structure (UITP, 2010)

It is commonly assumed that informal public transport exists since there is no other accessibility choice for the general public and that it is affordable than the formal mode of public transport. There seems to be a perception, however, that consumers are typically not satisfied with the quality of the service these modes offer. The previous study shows that most users are unhappy with certain aspects of its operation even though there are devoted users (Tri and Kubota, 2007).

For instance, trishaws have their origins in the hand-drawn rickshaws brought to Asia at around the beginning of the 20th century (Edgerton, 2008), which was later preceded in the 1920s by cycle-based trishaw. The trishaw is a cheap, easily accessed initial step towards micro-entrepreneurship (Ellis, 1999). The trishaw, in short, represents a role in the transport system that is well designed to transport people and goods in small, congested markets over a relatively short distance. In some urban areas, there could be two or three trishaw stations in a neighbourhood where operators are queuing to shuttle people and goods around the area or to surrounding stops or stations.

Trishaw driving is a year-round business, as trishaws are crucial year-round used to transport goods and people. In some places, there is a need for this service even during the monsoonal season when passengers are holding an umbrella and the trishaw operators are getting wet. Working as a trishaw puller can be risky, as the respiratory problem has been identified as a common medical condition (Avogbe et al., 2011). Hence, compared to young operators, elderly trishaw pullers (usually in their 50s and 60s) with health issues typically did less journeys.

2.1.2 Informality and its challenges

The informal transport operators are all battling to survive, in a competitive and rapidly growing city. Cervero (2013) stated that the transport of people and goods is complicated when faced with the challenges of rapid population growth, unemployment, congesting, poorly built and inefficient roads and overcrowded urban areas. In developing economies like in Asia, bicycles and trishaws offer an efficient, practically available, and affordable mode of transport. A recent analysis in Indonesia shows several significant factors and attributes to clarify the expectations and preferences of the customer about the service and indicated that paratransit is likely to continue considering its disappointment with some of its elements (Joewono and Kubota, 2017) Cervero (2013) highlighted, travel desires are extremely varied with some commuters want easy, convenient services and are willing to pay them a premium rate, while others are happy with moving slower and giving up some convenience in exchange for a break at the fare. Informal mobility empowers the fabric of the proposals for urban transport.

However, Carvero (2000) clarifies in many developing world mega-cities, massive motorisation, inadequate road infrastructure and the failure to adequately prepare for the future have contributed to intolerable levels of traffic congestion and air pollution. Formal public transport system seldom comes up with the challenge of addressing rising travel demands. This is because many public transport services are regulated monopolies and thus lack the incentive to control the costs, run efficiently, evolve and react to changing pressures on the market. Buses are also aged, often break down, and get caught in slow-moving traffic. Fares are also kept low to support the needy, but this decreases wages which in turn eliminates service.

Correspondingly, because of the description and the vulnerability of many informal operators' crashes, pedicabs, bicycle and other slow-moving vehicles along busy stretches of the road should be equipped with designated shoulder lanes, if possible. Since many motorists in the third world disregard traffic laws and drive dangerously, the physical separating between different modes is always more effective. In Yogyakarta, Indonesia, *becak* pedicabs are segregated from other traffic along Jalan Maliaboro, the most well-known commercial street of the area. Lane width allows for the passing of three *becaks* side by side. Other Asian's city, Hanoi also distinguishes the motorised and non-motorised traffic flows physically, mostly by lane striping and sign (Cervero, 2000).

Unfortunately, South African informal public transport is known for its escalating violence, whether it is a conflict between competing taxi operators and drivers, which may also

accidentally or deliberately target users) or against police and other operators of public transport (such as franchised operators). The same conflict has occurred regularly over the past 20 years and is generally referred to as "taxi wars". This is unique that it is attracted to characterise the entire industry as being deeply criminalised and disruptive. Dugard (2001) said "in sharp contrast to the other forms of political violence, taxi violence has continued and, in fact, escalated in the post-1994 period (that is after the demise of the Apartheid regime). In fact, if one form of violence has characterised the post-apartheid period it has been the taxi war."

In developing countries, competitiveness from the informal industry is commonly believed to be harmful to formal transport modes and the overall standard of urban transport. This is contradicting the suggestion by the World Bank to avoid 'on-street competition' among public transit operators in the interest of their commuters and other users (Gwilliam, 2002). However, interestingly, the informal operators are often given operational capabilities which compensate for formal operators' limitation.

There are several types of completions between formal and informal transportation, which may occur positively or negatively. For example, in South Africa, informal transport is not only competitive in terms of price but also on efficiency. As far as competition between formal and informal public transport modes is concerned, it appears that franchised bus companies are also likely to compete 'unhealthily' with minibus taxis. For example, the franchised bus company aims to increase their catchment areas by unnecessarily roaming their bus routes at their point of origin or destination in order to prevent minibus taxis from feeding or distributing them for fear that their users will be unwilling to move once onboard (Lomme, 2008). With that, they lengthen excessively the travel time of their customers and add a comparative disadvantage to bus service.

Formal public transport should not be the only choice for commuting if the fare is not affordable because, in most developing countries, the poor people and sometimes unemployed are the ones using this service. Formal services for commuters are still largely insufficient, as they have not been adapted to respond to a changing market for travel to new places of work. As an example, in Tshwane, South Africa, the increasing movement of employees to the emerging urban areas in the south of the city centre to Johannesburg is mostly catered for by highway minibus taxi. Throughout the nineties, demand for formal bus system operated by franchised private operators or local company plummeted by half (Lomme, 2008).

These situations might not be the case in developed countries such as the United Kingdom and more closely to Malaysia, Singapore, where public transportation is not only used by the poor but are also as a good alternative for the rich to commute due to its accessibility to an important part of the city and its efficiency. This study will discuss further the public transport practice in GWTHS.

2.2 The effects of mobility system towards heritage value and tourism industry of GTWHS

2.2.1 UNESCO World Heritage Site and tourism development growth

Tourism management and marketing academics acknowledged that the UNESCO certification has several consequences that include not just the growth of tourism, but also the protection of heritage and community well-being (Su and Wall 2014). This point is especially appropriate for cultural heritage since professionals in cultural heritage management have historically worked separated from the tourism industry (McKercher and du Cros 2012).

From a development point of view, tourism revenue will mitigate poverty by stimulating market growth and job formation. In theory, its compliance with biodiversity conservation and improving environmental services, and by improving education, local people are encouraged to support the preservation of the natural environment (Vadi and Schneider, 2014). Salim et al. (2011) stated that their research findings suggest that the trishaw acts as a sustainable mode of transport and is also made more environmentally friendly by the free carbon movement. Trishaw pullers are also flexible to any trail the tourists choose, depending on the packages offered.

Positive effects on the demand for tourism seems to strengthen the subjective evidence that the UNESCO "brand" can act as a marketing strategy to encourage more tourists to a site, thanks to its recognised privilege worldwide (Marcotte and Bourdeau 2012; Pedersen 2002; Yang et al., 2010). The growth of tourism in natural WHS will be advantaged when designed and operated in a sustainable manner. Where appropriate site protection mechanisms are in place, social, economic, and environmental benefits are all achieved, and tourism planning is aligned with the planning of the site execution (Borges et al., 2011).

Community participation can be another positive output of the development of tourism in WHS and has been discovered in many sites. Through some common impacts of the development of tourism in natural World Heritage Sites have been identified throughout the sites, the

explanations for this differ greatly and not surprisingly, cannot easily categorise to a particular cause. Somehow, the implications indicate a multitude of contextual factors ranging from a socio-political understanding scope of a site to evaluate the operation of certain problems related to engagement and coordination between stakeholders (Borges et al., 2011).

Contrastingly, negative impacts indicate that the UNESCO "brand" alone is not adequate to draw tourist flows to a country or the WHS geographic destination (Huang et al. 2012; Ribaudo and Figini, 2017). Despite that, existing literature explains that tourists are often typically concerned of the UNESCO brand, thereby, marketing efforts might result in a growing number of visitors after the designation rather than the designation per se (Poria et al., 2011). Furthermore, increased visitor pressure is interpreted as one of the major aspects connected with World Heritage Site status and can have significant effects on reputation, specifically of developments are either unplanned or very fast, beyond the ability of site facilities and management structures to deal with (Borges et al., 2011).

There are gaps in our understanding of how the development of tourism influences natural WHS, along with the nature and extent of different types of tourism impacts in and around sites, and the real issues for this. There still needs to be a better view of how the various actors react to these impacts and these entities should be considered as the drivers of change (Synman, 2014) However, if tourism is poorly executed and not done delicately, it can result in loss of biodiversity, destruction of the environment and adverse effects on local populations. As such, it is important that tourism in protected areas is properly handled and that the values of sustainable development (Tubbataha, 2013). This should not be ignored that the ultimate purpose of a protected area is the restoration and in the case of WHS, particular focus is placed on the protection, preservation and presentation of the characteristics (Meskell, 2013).

2.2.2 Heritage mobility system and tourist experience

The rise in tourism-related mobility is linked to a variety of factors, including overall population growth, urbanisation, and the spread of a consumer culture that values travel-related consumption (Hall, 2005). The sequential production of tourism as enjoyable and easy to access has become one of the core elements of tourism representation in the promotion of destinations.

With time and space, the mobilities of tourism are growing. Although the theory related to mobility growth is getting more attention, it is mostly in the context of Western countries, and very much less in the developing countries within the Eastern context. Hence, a closer analysis of mobility in the so-called emerging economies, which are becoming increasingly relevant in

terms of aggregate tourism consumption and development, will shed considerable light on our understanding of tourism and mobility.

As mentioned earlier, the mobility in the heritage site is supported by both formal and informal public transport. The later has an additional potential to contribute to experience WHS. For example, *beca* offers slow pace movement which allows site-seeing and together with it, more personal communication with the *beca* pullers. *Beca* pullers may be regarded in this analysis as someone who has the ability to become an informal tourist guide. An informal interpreter needs to be innovative and telling their narratives (Alberta Occupational Profile, 2010). A tourist guide is a person who offers services to visitors or some other individual by accompanying them on paying tours (Tourism Industry Act, 1992). The interpretation given should be rational, narrative, and capable of motivating tourists to enjoy the narrative presented. Tourists should be assured by the host to increase tourist arrivals at heritage tourism destinations with fascinating attractions and good services. With proper facilities provided, it will be able to enhance the quality of their experience, making them want to visit the place again hence boosting the local economy of one's place (Salim et al., 2011).

A tourist guide should know how to get attention from the tour groups by concentrating his interpretation on an object, event or idea when determining the type of narration during each stop at each historical site. Besides, some funny jokes are often included in tour guides to avoid tourists feeling bored throughout their tour (Salim et al., 2011). Khalifah (2007) stated that the success of tour guides depends on the tour guide who acts as a point of reference for the tourists. This is why storytelling skills are important in forming or destroying any tour group. As an example, if a tour guide provides information in the form of informal narrative, tourists might be encouraged to listen and feel interested in sharing the information given. Hence, a good tour guide needs to have the ability to dominate his listener and should be able to control the situation (Hall and MacArthur, 1998). With that, it will create more sense of appreciation towards the existence of historic buildings and its stories.

Cheng (2005) said all those stories by interpreters influence the accuracy of interpretation and thus affects the consistency of the experience of the visitors. They are inspired by revisiting the place. This only can be done by the informal operators like *beca* and with a good performance, especially when it comes to the hidden stories of historic buildings within heritage town like GTWHS. This informal way of education can be used to increase awareness of historic values

among individuals, as it has also influenced the behaviour of tourists (Hall and MacArthur, 1998).

Therefore, the benefits of using indirect markets to determine the desires of the population, such as the travel cost process, whose probability lies in calculating the ability to pay for the use of cultural resources as estimated by the economic activity involved in travelling to the tourist destination locations (Bedate et al., 2004). If the tourism mobility agenda moves well in space, its implementation in modern intellectual and geographical destinations, and the degree to which modern academic modes could have displaced interest in mobility, even if the practical effects are not completely addressed (Coles, Hall, & Duval, 2005, 2006, 2009)






3.0 Methodology

In general, this paper aims to understand trishaw dependency in an emerging WHS city of a developing country, specifically how community and tourists view informal public transport modes in terms of its functionality and future improvements. It seeks to give another perspective in looking at the hierarchical classification of public transport modes from many perspectives. Therefore, the outcomes can be derived in 2 research questions which are:




1. How *beca* act as informal transport then, now and in the future?
2. Does mobility system factor affect the heritage value and tourism industry of GTWHS?

Research methods were selected based on research questions. Table 1 **Error! Reference source not found.** summarises the research questions and the methods used.

Table 1: Research questions and methodology

Research question (RQ)	Method	Explanation
RQ 1: How <i>beca</i> act as informal transport then, now and in the future?		Identify the demand, needs and satisfaction of current service by the respondents
		Discuss the opinion on the <i>beca</i> transition from different stakeholders
RQ 2: Does mobility system factor affect the heritage value and tourism industry of GTWHS?		Explore the <i>beca</i> preference compare to other public transport by the respondents
		Classify the different views on mobility system impact from different stakeholders based on their role
		Presenting the area within walking distance radius between heritage buildings and the <i>beca</i> routes, to promote the heritage tourism industry

Legend:

	Questionnaire survey
	Interview
	GIS analysis

This study focuses on the whole area of GTWHS area which includes 5013 buildings within the boundary. There are 2 main stations of *Beca* which located in front of Cititel Hotel and at Swettenham Pier Cruise Terminal (see Figure 3). Both places are tourism place with Cititel Hotel is a hotel and Swettenham Pier Cruise Terminal is a place where the cruise ships docking.



Figure 3: The routes of *beca* and the existing stations

3.1 Questionnaire Survey

The questionnaire survey was seen as a successful strategy for effectively gathering data from a variety of respondents with the semi-structured interviews offering an ability to broaden with chosen respondents on such subjects (Pearce, 2019). For this study, the approach used for this questionnaire survey is self-completion which based on Robson (2016), it means respondents literally write their own response. The questionnaire is mostly submitted by post (or frequently online) allowing large samples to be collected with very little extra work.

An online questionnaire survey was created using a google form, a platform where the survey can be formed using different styles and easily accessible via the digital platform. It is presented in dual language, English and Malay to ensure the respondents can understand the questions clearly and making it more inclusive and responsive to the respondents. This is because, in Malaysia, the first language used for communication is Malays language and the second language use id English. Besides, multiple-choice questions are chosen to allow respondents to consider the answers within the context while Likert scale questions were for the respondents

to state their satisfaction and opinion of individual analysis (Pearce, 2019). An example of a questionnaire is included at **Appendix A**. Overall, the questions included:

- 12 multiple-choice questions; and
- 3 Likert scale

Basically, the survey forms have been distributed to the public (either local or foreigner) who have been to Penang. They will be assessed according to their experience with *beca* (i.e using *beca* or not using) to understand their needs, demands and satisfaction level. The question focused on the frequency of usage, purposes of using it and not using it, the reason they prefer *beca* other than other public transport, kind of improvements in order to enhance its service and satisfaction level of *beca* service that includes safety, convenience, accessibility, cleanliness, information and ticketing system elements. In total, the study collected 192 respondents who are:

- 124 residing in Penang;
- 64 residing outside Penang; and
- 4 residing outside Malaysia

The geographical area of which to wish of generalising the outcome is an important factor (Robson, 2016). The respondents came from all over the places to certify that the data will not bias to only local people who visited GTWHS, but also some surveys from the outsiders.

Thus, graphical displays have been used to represent the statistical data collected, so that it can be generated in a variety of ways and a variety of modes. It will be able to affect comprehension of the information and the influence the multiple presentation styles (Wikipedia, 2020). This is to ensure the data is presentable in the more interactive display.

3.2 Interviews

The other method applied in this study is a semi-structured interview. The semi-structured interview approach is when the interviewer has an interview guide that acts as an outline of subjects to be discussed, as well as a standard language and order for questions. However, the terminology and sequence are also significantly changed depending on the conversation flow and more impromptu questions are asked to follow up with what the interviewee's feedback (Robson, 2016). The benefit of this method is it gives freedom to the interviewees to discuss

the topic openly and deeply and would be able for us to give some comments based on their response (Di Cicco-Bloom and Crabtree, 2006).

The interviews obtained via email interview, to give the interviewee time to respond to the emerging discussion especially when the interviewer and interviewee reside in various areas of the world divided by time zone (Robson, 2016). The questions for the interviewees are:

1. Opinions about how the role of *beca* as an informal transport in GTWHS then, now and in the future; and
2. Effects on the mobility system in GTWHS and its impact on heritage value and tourism industry.

The interview has been taken with 3 important stakeholders who responsible for shaping and conserving George Town to its World Heritage value which are:

- Local council (Plan Malaysia Pulau Pinang);
- State Government of Penang (George Town World Heritage Incorporated (GTWHI));
- and an established city-making organisation expert in urban regeneration (Think City Sdn Bhd).




Hence, the coding analysis will be used to translate the interview outcomes from these three stakeholders. This analysis tool is significant to the multiple numbers of stakeholders that we have, in response to one topic for each research question to be discussed each time. It aligns with the statement by Miles and Huberman (1994) who mentioned if codes are programmed or established along the way, simple operational meanings are important so that they can be extended over time by a single researcher and several researchers can consider the same phenomenon as they code.

3.3 GIS Analysis

Additional data collected using an instrument used for this study are maps from google earth and GIS open-source data. A GIS is a conceptualised structure capable of collecting and interpretation of spatial and geographical data (Wikipedia, 2020). The importance to include this method as its capacity to project the movement of *beca* in this WHS and the buildings covered in the area.

The data on each building’s category within GWTWS was plotted in QGIS software (3.8 version) for analysis. The buildings’ outlines were digitised by using google earth map and each building’s categories and definition were extracted from Special Area Plan George Town World Heritage Site 2016 as shown in Table 2:

Table 2: The examples of building heritage categories and some definitions

Building Heritage Category	Definition
 <p data-bbox="379 965 608 1021">Category I City Hall, Esplanade</p>	<p data-bbox="810 701 1366 913">Buildings, monuments, objects, and sites are important in that they reflect the authenticity of the cultural landscape and therefore the OUV of the GTWHS, and formerly under the National Heritage Act (2005)</p>
 <p data-bbox="252 1274 735 1335">Category II An ensemble of shophouses, Jalan Sri Bahari</p>	<p data-bbox="810 1151 1358 1227">Buildings, sites, and objects of special interest that warrant every effort being made to preserve them</p>
 <p data-bbox="363 1684 624 1740">Others Savy Hotel, Weld Quay</p>	<p data-bbox="810 1512 1353 1588">Modern buildings, other buildings than Category I and Category II buildings</p>

For the whole area of GTWHS, there are 82 Category I buildings, 3771 Category II buildings and 1160 other category buildings (Special Area Plan George Town World Heritage Site, 2016). All Category I buildings were chosen as a point to create 400-meter buffers which equivalent to 5-minute walk. Walking distance is a fixed distance travelable by foot. In the

planning profession concept, the unit of measurement for commonplace was often represented by a 400-meter radius (Olson, 2010).

For this study, buffer analysis has been applied to study the estimate distance between Category I buildings and the *beca* route, as well as the accessibility and visibility from the route to the Category I buildings. Most of Category II buildings are along the routes. Buffer analysis is used to create a common circle of a certain radius centred on a given location to delimit a catchment or point of interest (Jia, 2017) The buffer analysis concept implemented as shown in Figure 4:

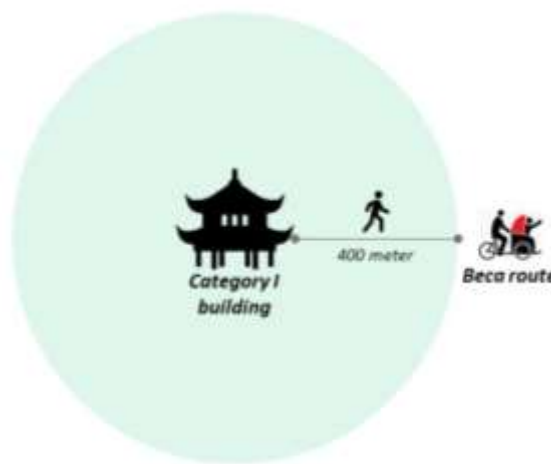


Figure 4: 400-meter buffer which equivalent to 5-minute walk

4.0 Results and Discussion

This chapter will discuss the analysis of the data collected through three methods mentioned in Chapter 3.

4.1 The transition of *beca* services in GTWHS

The first research question posed by this study designed to determine how *beca* services in GTWHS has shifted. As time passed by, the demand for this kind of informal transport has changed alongside with its definition and by various demographic who came to this area. Therefore, the first stage consisted of identifying the regularity, purposes, types of current demands, with respondents asked to rate their satisfaction level of existing service of *beca*.

As a way to explore how the transition of *beca* happened, respondents were asked about their experience visiting GTWHS and either they are using or not using *beca* services.

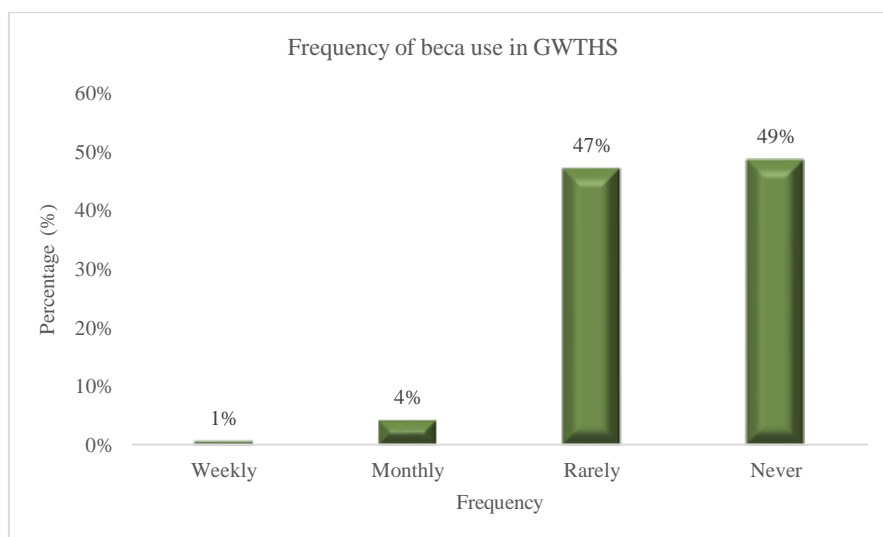


Figure 5: Frequency of *beca* uses among respondents

Figure 5 indicates the frequency of the respondents using *beca* services in GTWHS. Most of them had 'Never' used *beca* which is nearly half of the respondents (49%), 47% used the service 'Rarely' while other small numbers of respondents (4%) used it 'Monthly'.

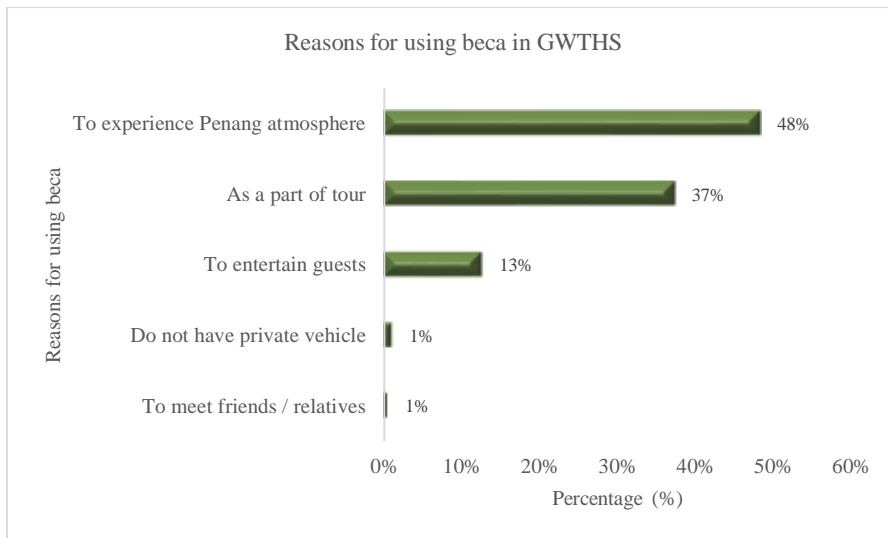


Figure 6: Reasons for using *beca* among respondents

The purposes of respondents using *beca* service are shown in the bar chart (Figure 6). Majority of people (48%) using *beca* services for the purpose ‘To experience Penang atmosphere’, followed by ‘As a part of the tour’ and ‘To entertain guests’ with 37% and 13% respectively. The number of respondents involved to provide an answer to this question is only respondents who have used *beca* excluding a group of respondents who have ‘Never’ used *beca*.

These 2 bar charts illustrate why a large number of respondents ‘Rarely’ used *beca*. It is because they are all tourists in which the frequency of use aligned with the purpose of using *beca*, which is only for tourism purposes and not for daily use.

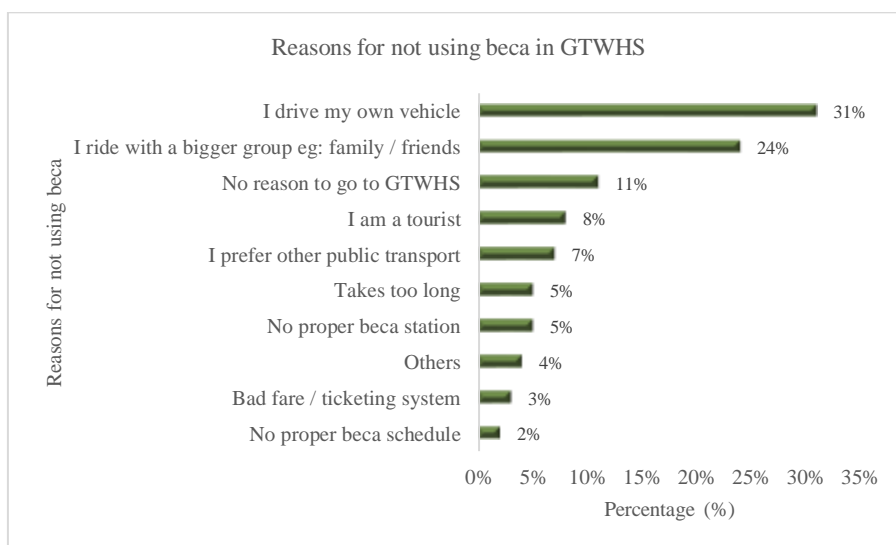


Figure 7: Reasons for not using *beca* among respondents

Figure 7 reveals the reasons why the respondents who ‘Never’ used *beca* service is not using it in GTWHS. Firstly, almost a quarter of them (31%) said ‘I drive my own vehicle’. Secondly, 24% of respondents chose the reason answered ‘I ride with a bigger group eg: family/friends’ while 11% said they have ‘No reason to go to GTWHS’

In relation to the frequency and purposes of respondents using the *beca* services, the figure signifies them well. They are not using the services more frequent because several factors such as mode of commuting preferred, number of members in the trip to GTWHS and rationales of them being at GTWHS area.

On top of that, there are several reasons for not using it. Interestingly, there are 4% of ‘Others’ reasons, and their reasons were ‘The weather is too hot in GTWHS’ and ‘I felt pity because the pullers are too old, and I am too fat for them’. As for these reasons, it reflects with the demographic of the *beca* pullers who are dominated by the elderly (see Figure 8)

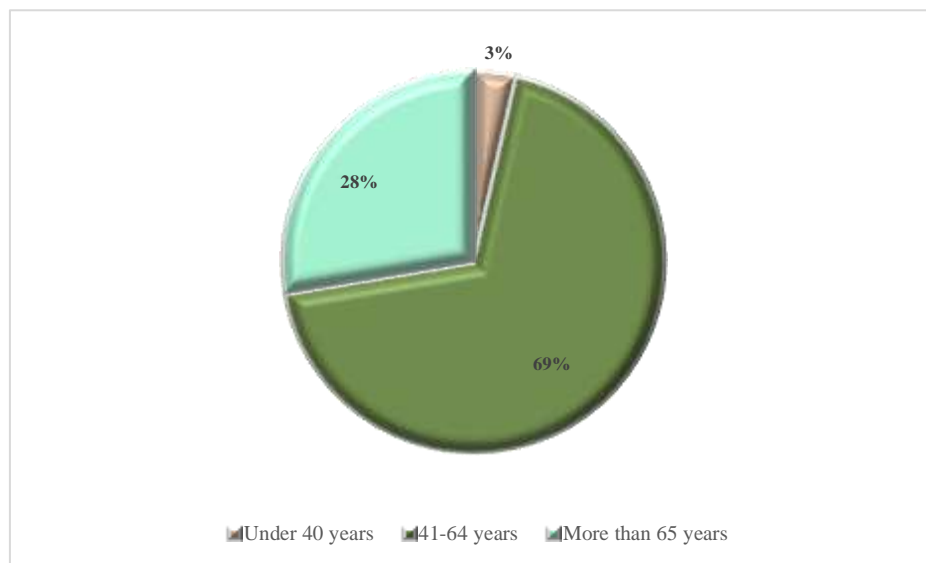


Figure 8: Age groups of *beca* pullers

The pie chart shows the age groups of the *beca* pullers in GTWHS. 41 – 64 age group dominates the chart with 69%, then 28% in 41 – 64 group and only 3% is under 40 years group.

United Nations defines the dependency ratio of the population as “a ratio of people who are generally not in the labour force (the dependents) to the workforce of a country (the productive part of population). The dependent part includes the population under 15 years old and people aged 65 and over. The productive part of the population accordingly consists of the population between 15 and 64 years”. It is a huge proportion of people aged 65 and above and people near

that range, still operating *beca*. Poverty brutality and aged weight mean that some *beca* pullers are reluctant or unable to embrace a new career.

Oppositely, operating *beca* probably the only way for the elderly to have their own income, as there is no regulation and age limit to operate *beca*.

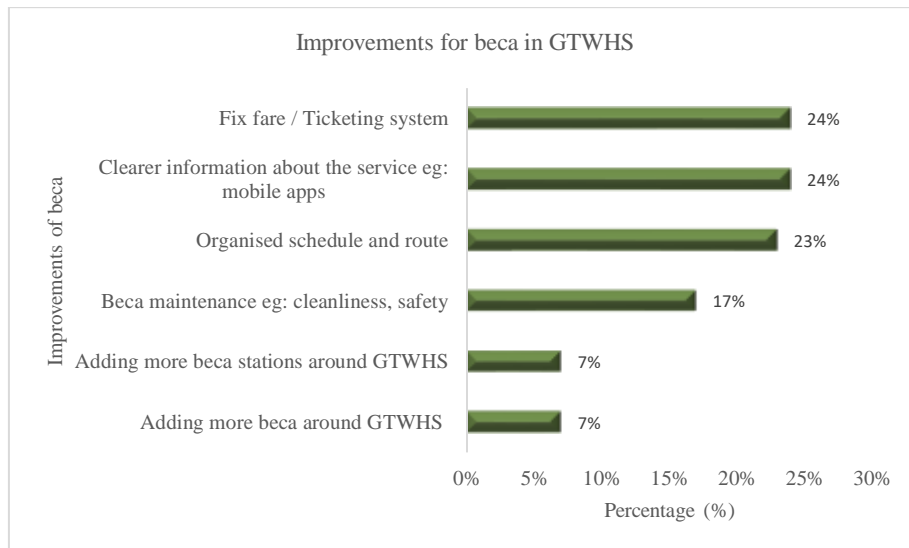


Figure 9: Improvements for *beca* from the respondents

As for improving the *beca* service, the respondents had been asked about the improvement that they would like to see. The majority of the respondents in Figure 9 wanted ‘Fix fare / Ticketing system’ and ‘Clearer information about service eg: mobile apps’ for *beca* services in GTWHS with both 24%. In addition, 23% of them liked to have ‘Organised schedule and route’ for this informal service. These findings demonstrate how respondents have a preference to have the same service as other formal public transports do. They expected to be treated systematically with all informative and managed services from *beca*.

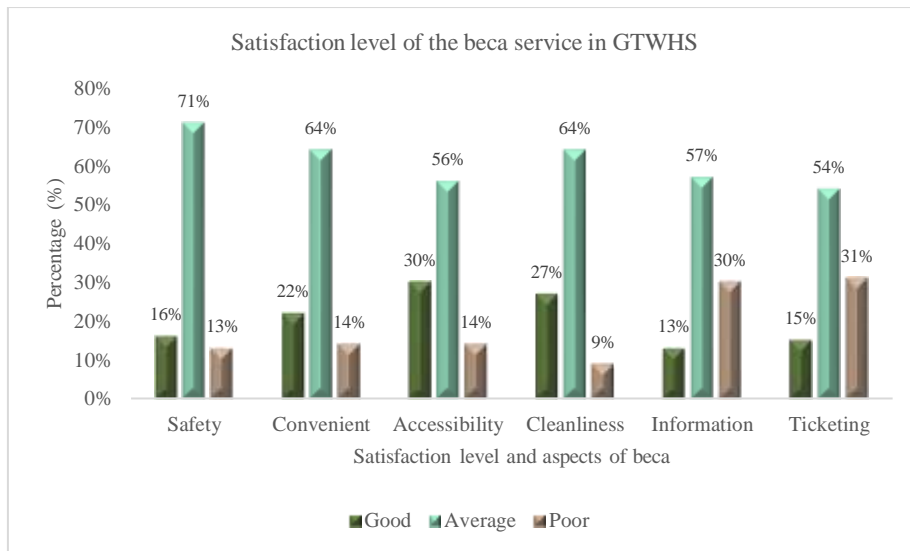


Figure 10: Satisfactions level for several aspects of *beca*

Most of the respondents perceived the current condition of the *beca* services on numerous elements such as safety, convenience, accessibility, cleanliness, information, and ticketing system as ‘Average’, followed by ‘Good’ and an only small percentage of ‘Poor’ as shown in Figure 10. Respondents were questioned to indicate their overall opinion to the general service of *beca* in GTWHS, as indicated in Figure 11.

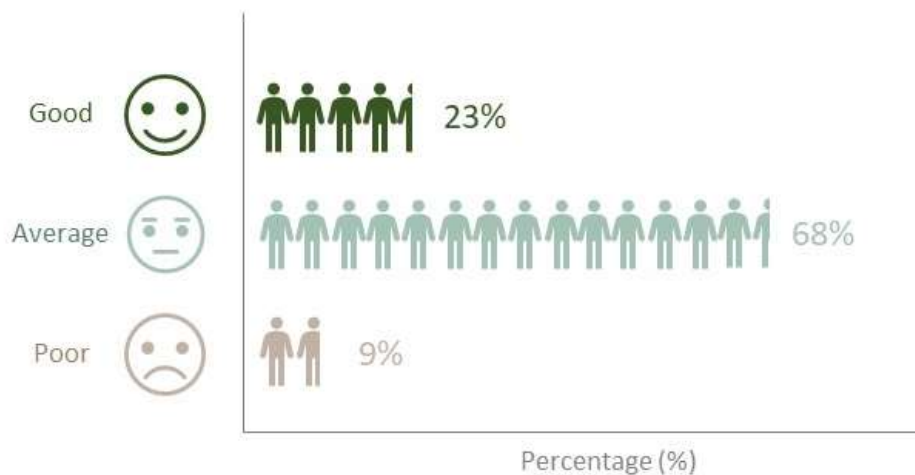


Figure 11: Overall opinion about *beca* service

Generally, more than half of the respondents felt the *beca* service as ‘Average’ with 68%. 23% felt they are all ‘Good’ while only 9% sensed ‘Poor’. These findings of ‘Average’ level of satisfaction and overall opinion somehow corresponds to the existing service that the















respondents been served with those improvements that they wanted, the *beca* pullers basic demographic information, and the purpose of their use.

The figure explained the satisfaction level of the respondents using *beca* services. Commonly, the average feeling from the respondents is linked to other factors, for instance, the reason they use *beca* and the improvement they wanted. Considering they are mostly a tourist, they enjoy the atmosphere, and at the same time, they expect better service for their visit to enrich their experience. This finding contradicts with Tri and Kubota (2007) who said most users not satisfied with some aspects of the informal transport. Nevertheless, despite their disappointment, these findings go along with Joewono and Kubota (2017) by saying user still use its service due to some considerations and features. Yet, different users have a different preference, like Cervero (2013) painted different choice by users and their willingness to pay the service.

Also, argument by Lomme (2008) about the competition among informal transport operators on efficiency, fare and catchment, for this *beca* case, it is not valid due to the group of people using *beca* service. Different people might have different purpose of the visit that will lead to a different mode of mobility choice. Respondents who are using *beca* services in GWTHS are mostly tourists, and they do not have a formal reason for commuting using *beca* other than for enjoyment or exploration. The argument might be contrasted if the group of people are locals and their purpose is for commuting to the workplace, for example.

To further understand the transition of *beca* happened in GWTHS from the stakeholders' perspective, the outcomes from the interview were analysed using coding analysis as shown in Table 3.

Table 3: The coding analysis based on the interview session by three stakeholders

No.	Issues			
1	Changing of demographic and purpose of visiting GWTHS			
2	<i>Beca</i> pullers are mostly elderly			
3	Changing of <i>beca</i> 's functionality			
4	Competition with other formal public transport			
Legend:		 Nur Safuraa Binti Mohamed Salib (Plan Malaysia Pulau Pinang)	 Muhammad Hijas Sahari (GTWHI)	 Dr Matt Benson (Think City Sdn Bhd)

Based on the responses acquired in this section, some critical reflections can be drawn. The transition happened in the role of *beca* from one of the main public transport to an informal public transport catering for tourism purposes. The *beca* was created as an informal transport to transport people and goods previously, without restriction or manual about its destination, direction, timetable, and fix fare, agreeing to the statement from Ellis (1999) who said informal transport worked informally with very affordable and convenient service back then.

However, since *beca* is mostly operated by elderly operators, the physical condition of *beca* is on average for tourists who dominate the users' group. Two different views from this situation, one: to maintain its classic look and authenticity, and two: they said that they had saving problems due to ill health and inability to support their families. This point refers to the statement by Avogbe et al. (2011) the condition of *beca* is important especially when it comes to the unpredicted weather, the elderly who operate *beca* need to struggle in making sure their customer is in a good condition, at the same time harsh weather is affecting their health performance.

Furthermore, the informality of *beca* service is well-suited independent worker, for all *beca* operators. One of the income sources is regular customers. Here is where the micro coordination process and the most important impact of informality for *beca* operators. This comes to a crucial part of their economic structure. Some operators had three to five important customers, who frequently asked them to bring and entertain their friends around GTWHS. Elderly may have a reliable range of customers, they know well GTWHS geographically, equipped with knowledge on the spatial evolution of the city they work in, and they know when and where to get fares. Indeed, one customer accounted for the single largest proportion of their profits.

Additionally, the result is in line with Carvero (2013) who mentioned the struggle of informal transport operators with the rapid growth of urban areas. They are mostly having no other income and solely depends on *beca* service. However, places with informal transport choices, the result might differ.

4.2 The relationship between the mobility system with heritage value and tourism industry

The second research question posed by this study consists in discovering the impact of the mobility system on the heritage value and tourism industry of GTWHS. Respondents were required to justify the reason why they prefer to use *beca* concerning its informality and

consequences to the historical value of the site. Different measures of clarifying how far the UNESCO title has changed the mobility system commonly and to retain the value of heritage.

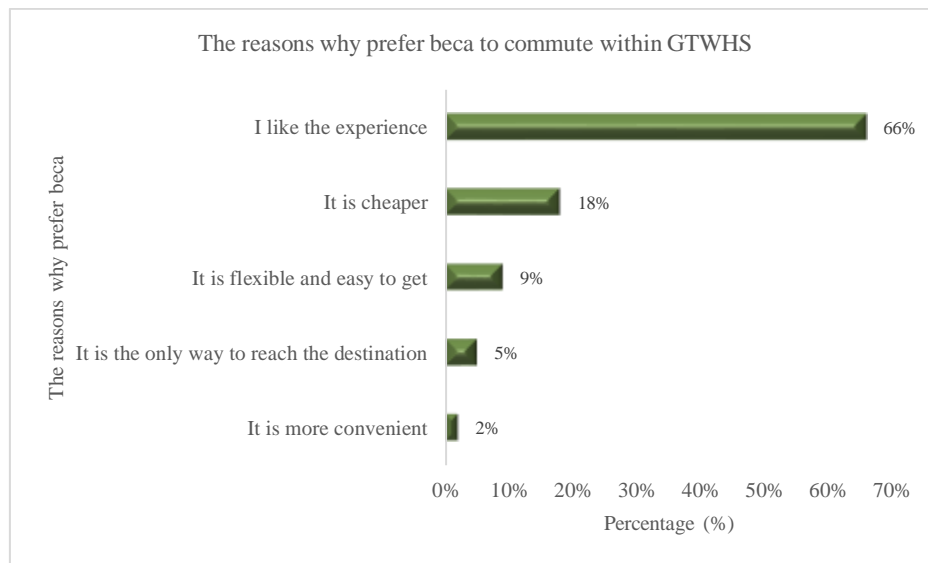
















Figure 12: The reasons why respondents prefer *beca* than other mobility systems

Figure 12 shows most respondents (66%) used *beca* service because of the experience. The percentages of 18% and 9% of them chose this service because they said, ‘It is cheaper’ and ‘It is flexible and easy to get’.

From this finding, it implies that respondents preferred *beca* because of not only the experience of riding *beca* itself but also because of its informality. Respondents would be able to enjoy the experience watching heritage building in persons due to its slow pace in movement, smelling the nice scent of the good food, listening to the cultural occasions happening almost every day without being bounded by the glasses of more formal vehicles. Using *beca* allows for having the flexibility in terms of fare and routes, which depends on how respondents negotiate with the *beca* pullers. Respondents also enjoy their journey because the *beca* pullers are good narrators, telling them some stories about the places they passed through, and delivers information that makes users understand and feel interested with the place, supporting the argument by Salim et al. (2011). Khalifah (2007), Hall and MacArthur, 1998, and Cheng (2005), who eagerly emphasise about the important role of informal tour guide served by *beca* pullers.

To discover more about the influence of the mobility system towards heritage value and tourism in GTWHS, the outcomes from the interview were evaluated using coding analysis as shown in Table 4.

Table 4: The opinion about the effects of the mobility system towards heritage value and tourism industry on stakeholders point of views

No.	Issues			
1	Upgrading the <i>beca</i> service to be more systematic and organised			
2	Introducing new technology to the <i>beca</i> system but still preserve the heritage guideline			
3	Bringing <i>beca</i> together with existing mobility system and future intervention to boost the tourism industry and while preserving heritage assets			
4	Reinforcing the <i>beca</i> society to manage their welfare and make the service more professional			
5	<i>Beca</i> service has only been used by international tourists who appreciate the value of heritage more than local			
6	More awareness of the value of heritage need to be developed among local community			
Legend:		 Nur Safuraa Binti Mohamed Salib (Plan Malaysia Pulau Pinang)	 Muhammad Hijas Sahari (GTWHI)	 Dr Matt Benson (Think City Sdn Bhd)

The designation of the World Heritage Site has increased the ability to improve the demand and investment in industries and real estate related to tourism, as well as other sectors that were affected by the George Town industry hop since its designation. The development of GTWHS is therefore important in order to increase the potential of further tourist arrivals. Given that there is a strong correlation between tourism services which include the mobility system chosen, tourist satisfaction and liveability, it can actually boost GTWHS.

Likewise, tourism revenue benefits and enriches local communities to play significant roles and advertise Penang-made products and services that foster local culture, just like *beca* operation. The statement by Bedate (2014) also endorses the indirect market from the mobility tourism which involved of other economic activities using current cultural assets, and statement by Salim et al. (2011) explaining the importance of the attraction and services that will promote to the local economic and personal travel experience among tourists.

GIS tool has been used to correlate the relationship between spatial and *beca*'s activity. The buffer analysis is used by geocoding all Category I buildings within GTWHS area and creating a 400-meter buffer from each Category I building as mentioned in Chapter 3. As a result, all

Category I buildings with 400-meter buffer covered the whole *beca* routes as shown in Figure 13.



Figure 13: The map of the 400-meter buffer from Category I buildings

The analysis demonstrates the *beca* users can access and see Category I buildings if they are on the *beca* trip. Category II buildings are mostly visible along the route. The *beca* users will cover all tourist attractions and heritage buildings in the study area. The *beca* pullers will share some storytelling about the history of the area they passed through and make the trip more exciting. The tourists also can always ask and make two ways of communication more valuable. Sometimes, the *beca* pullers provide a pictorial map to the tourists as a courtesy to make the trip more understandable and enjoyable. For some places, the *beca* pullers will stop and give some time for the customers to see, touch and even helping them to capture some photos of attractive buildings and continue the journey. This is because the distance between the attractive building and the route is just within walking distance (see Figure 14). The statement concurs with Hall and MacArthur (1998) who believes by shaping tourist's behaviour through the awareness of the historic value way in an informal approach.

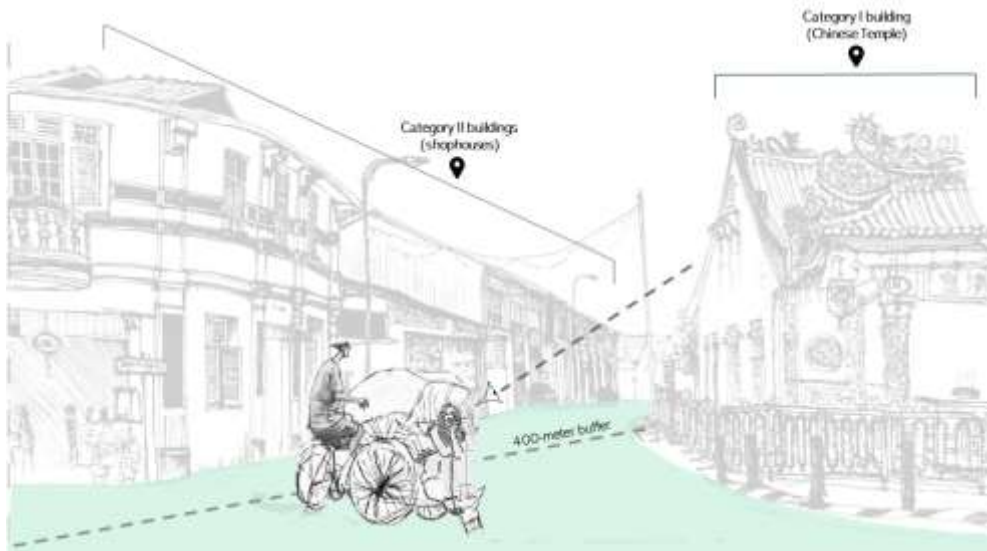


Figure 14: The illustration of *beca* puller brings two tourists. Category I building is visible from *beca* route and surrounded by other Category II buildings

However, it poses some interesting questions as to whether the mobility agenda for tourism moves well in space in terms of geographical destinations for tourism, and the value of theoretical consequences towards heritage site. Informal transport like *beca* usually used for leisure and to relish along the route, due to the slow pace journey. The tourists will be able to enjoy each building throughout the journey. Compare to the other formal transport such as taxi or bus, it is usually chosen by people who want to go to a particular destination and most likely need to arrive at the specific time. This group of people will not be able to see the detail of each building in GWTHS, due to the fast journey. Hence, informal transport such as *beca* is more suitable for tourism and unhurried trips.

In addition, GTWHS has its own benefits. Argument by Marcotte and Bourdeau (2012) about the advantage of being announced as a World Heritage Site, people get to know GTWHS more, especially at the international level. Penang Institute (2017) mentioned that the UNESCO listing has bolstered tourism 6.31 million visitors since 2008. Heritage tourism supports the culture of GWTHS and offers a chance to learn, preserve and retain the place on which tourists concentrate on. This opportunity emphasised the cultural history which provides the basic chronology of a culture.

Thus, it is significant to design GWTHS in a sustainable approach, where existing heritage value needs to be preserved well. Flexible mobility system will generate the benefits more as GTWHS is an old city, and not much physical work can be done. The current network system in that area accommodates the current use and demand. For example, the addition of space for

new transport facilities will cause the demolition of some heritage components, to rebuild the new construction. With that, the identity and value of heritage will slowly be weakening, and tourism in GTWHS will become modern and commercialise, less unique since we can get this kind of tourism anywhere in this world.

5.0 Conclusion

This chapter will discuss the overall conclusion based on the analysis and discussion performed. To conclude, *beca* acts as a sustainable mode of transport and more environmentally friendly with free carbon emission. Nowadays, people use *beca* for tourism purposes to experience the inexplicable experience in GWTHS. The respondent who is not using *beca* prefers another alternative to make a journey around GTWHS such as taxi, Grab and private vehicles since they have their own private vehicle or travel in a bigger group. Furthermore, the age factor of *beca* pullers that are mostly elderly also become a concern from the respondents due to sympathy feeling and the effectiveness of the service. Additionally, respondents prefer a better system of *beca* service by improving *beca* service to become more systematic and organised. Besides that, several factors such as safety, convenience, accessibility, cleanliness, information and ticketing, respondents rated them as average, as well as overall opinion about *beca* service in GWTHS.

As George Town has been declared as World Heritage Site by UNESCO, the tourism industry in GTWHS increase, and this has encouraged people to travel to GWTHS to appreciate its uniqueness. The title somehow inspires people to have a group visit, as GWTHS is the best place for family and group of friends to visit, to try the food, beautiful buildings to explore and the variations of attractive activities to endeavour such as interactive museums, and artistic cottage hotel. All those things that are unique and can be found only in GWTHS.

The Penang State Structure Plan 2020 mentioned about the provision of wider space for pedestrians, bicycle and *beca*, at the city centre, public realm and civic centre as they are a part of state transportation system network. This is one of the initiatives to create the holistic network regionally to enhance the level of accessibility within the area. Besides that, the plan also cited the importance of integrating the land use planning with traffic planning including the pedestrian walkway, bicycle and *beca* lane at the city centres and high-density residential areas. This proposal in line with Cervero (2000) statement about several Asian's cities that implemented designated lane concept for informal transport. It is crucial to plan the cities together with the transport network as they complement each other and ensure that the plan is well-planned and fully utilised. The infrastructure planned need to focus on carbon-free mobility while making people feel a sense of appreciation.

The state government can collaborate with Non-Government Organisation (NGO) to improve *beca* creatively. *Beca* appearance can be retained as how it is now to conserve the originality,

and probably can improve in terms of physical condition. Besides that, the government can make an initiative to provide an incentive for the *beca* operators to attract more young people to participate in the business. Young *beca* pullers can enrich the quality of *beca* experience, especially in terms of effort to maintain the condition of *beca*, the workforce to bring tourists on the *beca* and creativity to tell tourist about the story along the ride. More skills courses and seminars should be organised to guide and share information about the system to certify the *beca* pullers keep update with the trend and ensure they are keeping the value of heritage mobility in GTWHS.

On the other hand, government and policymaker can make an effort in acknowledging *beca* system more established and efficient. As an example, *beca* can have its own system like Uber. People can make an order via the mobile application. The system works its way into market operating. Most *beca* will be expected to have the application, which will become a part of a market strategy. It is not only contributing to their economic welfare but also their entertainment and social interaction.

However, Koay, a *beca* operator has his worries if there is any suggestion on modernising the *beca*. He said, “If *beca* becomes motorised, how different will they be then from taxis and Grab cars?”. It demonstrated how to doubt the operators are if the stakeholders plan to do upgrading of *beca* service which will ultimately affect its originality which putting *beca*’s heritage value under threat (Swan, 2020)

As a conclusion, local people and tourist should opt to use *beca* as a mode of commuting in GTWHS as it will help to enrich their experiences when visiting GWTHS and at the same time help to contribute boost the informal transport service. Therefore, heritage trishaw should be categorised as one of the alternatives to public transport in the informal public transport category of the hierarchical classification. The use of *beca* help to introduce GTWHS in detail to the tourists and enhance one’s sense of place. It is important to improve the quality of *beca* as it is historically used by local and currently use by tourist, as long as it is still relevant. Some improvements need to be considered while preserving its value. In order to conserve GTWHS as one of the treasured sites in this world, we need to take care of its cultural gems, while inviting people to GTWHS to improve social, economic and sustainability.

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Appendix A: Questionnaire Survey Form

7/6/2020

Beca Service Experience in George Town World Heritage Site (GTWHS)

Beca Service Experience in George Town World Heritage Site (GTWHS)

Beca Service Experience Survey

* Required

1. How often do you use the beca service? (Berapa kerapkah anda menggunakan perkhidmatan beca?) *

Mark only one oval.

- Everyday (Setiap hari) Skip to question 2
- Weekly (Seminggu sekali) Skip to question 2
- Monthly (Sebulan sekali) Skip to question 2
- Rarely (Jarang-jarang) Skip to question 2
- Never (Tidak pernah) Skip to question 8

Beca Service Experience in George Town World Heritage Site (GTWHS)

Beca Service Experience Survey

2. What improvements would make for a better beca experience? [Choose 2] (Apakah perubahan yang boleh dibuat untuk meningkatkan lagi pengalaman menggunakan perkhidmatan beca?) [Pilih 2] *

Check all that apply.

- Clearer information about the service eg: mobile apps (Maklumat yang lebih jelas mengenai perkhidmatan beca contohnya aplikasi menggunakan telefon bimbit)
- Organised schedule and route (Jadual dan laluan yang teratur)
- Fix fare / Ticketing system (Tambang yang tetap / Sistem pertiketan)
- Adding more beca stations around GTWHS (Penambahan lebih banyak hentian beca di sekitar GTWHS)
- Adding more beca around GTWHS (Penambahan lebih banyak beca di sekitar GTWHS)
- Beca maintenance eg: cleanliness, safety (Penyelenggaraan beca contohnya aspek kebersihan, keselamatan)

Other: _____

3. What is/are the main reason for you using the beca service? [Not more than 2]
(Apakah sebab anda menggunakan perkhidmatan beca?) [Pilih tidak lebih dari 2]

Check all that apply.

- To experience Penang atmosphere (Untuk merasai suasana Pulau Pinang)
- To meet friends / relatives (Untuk berjumpa kawan / saudara)
- To go to work (Untuk ke tempat kerja)
- To go to school/college (Untuk ke sekolah / kolej)
- As a part of tour (Sebagai sebahagian daripada lawatan)
- To entertain guests (Untuk menghiburkan tetamu)
- Do not have private vehicle (Tidak mempunyai kenderaan sendiri)

Other: _____

4. Why do you use beca service rather than other public transport? ([Not more than 2]
(Mengapakah anda menggunakan beca berbanding pengangkutan awam yang lain?) [Pilih tidak lebih dari 2] *

Check all that apply.

- It is cheaper (Lebih murah)
- It is more convenient (Lebih selesa)
- I like the experience (Suka pengalaman)
- It is easy to get (Lebih mudah didapati)
- It is the only way to reach the destination (Satu-satunya cara untuk sampai ke destinasi)

Other: _____

5. How aware are you of the schedule and routes of beca service in GTWHS?
(Sejauh mana anda mengetahui mengenai jadual dan laluan perkhidmatan beca di GTWHS?) *

Mark only one oval per row.

	Not aware (Tidak tahu)	Somewhat aware (Agak tahu)	Aware (Tahu)
Schedule (Jadual)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Routes (Laluan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Please rate your level of satisfaction with beca service: (Sila menilai tahap kepuasan anda mengenai perkhidmatan beca:)*

Mark only one oval per row.

	Poor (Tidak baik)	Average (Sederhana)	Good (Baik)
Safety (Keselamatan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Convenience / Comfort (Keselesaan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessibility (Mudah sampai)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleanliness (Kebersihan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information (Maklumat)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fare / Ticketing (Tambang / Pertiketan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. What is your overall opinion of the beca service? (Apakah pendapat anda mengenai perkhidmatan beca secara keseluruhannya?)*

Mark only one oval.

- Poor (Tidak baik) Skip to question 9
- Average (Sederhana) Skip to question 9
- Good (Baik) Skip to question 9

Beca Service Experience in George Town World Heritage Site (GTWHS)

Reason not using beca service

8. What are the main reasons you DO NOT use the beca service more frequently? [Choose 2] (Apakah sebab utama anda TIDAK menggunakan perkhidmatan beca dengan lebih kerap?) [Pilih 2] *

Check all that apply.

- I drive my own vehicle (Saya memandu kenderaan sendiri)
- I ride with a bigger group eg: family / friends (Saya bersama dengan kumpulan yang besar contoh: keluarga / kawan-kawan)
- No proper beca schedule (Tiada jadual yang teratur)
- No proper beca station (Tiada hentian beca yang teratur)
- Bad fare / ticketing system (Tambang dan sistem pertiketan yang tidak memuaskan)
- Takes too long (Mengambil masa yang lama)
- I prefer other public transport (Lebih suka menggunakan pengangkutan awam yang lain)
- No reason to go to GTWHS (Tiada sebab untuk ke kawasan GTWHS)
- I am a tourist (Saya adalah pelancong)
- Other: _____

Beca Service Experience in George Town World Heritage Site (GTWHS)

Respondent's demographic survey

9. Gender (Jantina) *

Mark only one oval.

- Female (Perempuan)
- Male (Lelaki)

10. Which of the following best describes what is your age group? (Manakah antara berikut merupakan kumpulan umur anda?) *

Mark only one oval.

- 12 - 18 years (12 - 18 tahun)
- 19 - 30 years (19 - 30 tahun)
- 31 - 40 years (31 - 40 tahun)
- 41 - 65 years (41 - 65 tahun)
- > 65 years (Lebih 65 tahun)

11. Are you: (Adakah anda:)*

Mark only one oval.

- Malaysian (Warganegara Malaysia)
- Non-Malaysian (Bukan warganegara Malaysia)

12. Which of the following best describes where you live? (Dimanakan anda tinggal?)*

Mark only one oval.

- Penang, Malaysia (Pulau Pinang, Malaysia)
- Other Malaysian's state (Negeri lain di Malaysia)
- Overseas (Luar negara selain Malaysia)

13. Ethnicity: (Bangsa:)*

Mark only one oval.

- Malay (Melayu)
- Chinese (Cina)
- Indian (India)
- Other: _____

14. What is your highest education level? (Apakah tahap pelajaran anda?) *

Mark only one oval.

- No schooling completed (Tidak menghabiskan sistem persekolahan)
- Primary school (Sekolah rendah)
- Secondary school (Sekolah menengah)
- Some college (Kolej)
- Diploma (Diploma)
- Bachelor's Degree (Sarjana Muda)
- Master Degree / PhD (Sarjana / Doktor Falsafah)
- Other: _____

15. Which of the following best describes your occupation? (Apakah pekerjaan anda?) *

Mark only one oval.

- Not employed (Tidak bekerja)
- Student (Pelajar)
- Retired (Pesara)
- Professional expert (Ahli profesional)
- General worker (Pekerja am)
- Other: _____

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