Solutions to improve the attraction of Hai Phong public transport system

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Abstract. Public transport is an indispensable demand of all cities in the world. From the 1990s, many cities in Vietnam have installed public transportation networks. Admittedly, the public transportation system is inefficient and has not met its objectives. Hai Phong is a large city in Vietnam whose public transport system still faces many shortcomings. Developed in 2004, the public transport system has only met 1% of people's needs. This study presents the present condition of the bus public transportation system in Hai Phong City and examines the reasons why public transportation does not match people's travel demands. Based on the findings, authors propose solutions and policies to improve the attractiveness of buses to attract people to use public transport services, help develop public transport and safeguard the environment.

Keyword: public transport, transport planning, management, policy, Hai Phong

1 Introduction

Strong development and urbanization, as well as an increasingly synchronously developed transportation system, contribute significantly to economic growth and improve regional commercial exchanges. Yet, cities now face several growth obstacles, including traffic congestion. The public transportation network has been and continues to be an important component of the urban transportation system, serving to increase urban transportation capacity, reduce traffic congestion, and improve the urban environment. In particular, a mode of transportation, the bus, requires special consideration in the city's sustainable urban development strategy [1]. Hai Phong is a class-1 city directly under the central government's control, the main seaside gateway; the Northern center of industry, commerce, tourism, service, and fisheries with developed infrastructures. According to the

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most recent city census in Vietnam, Hai Phong has the third highest population with 2,090 million residents, trailing only Hanoi and Ho Chi Minh City. The total natural area is 1,527.4 km², and there are 15 district administrative units including 7 districts, 6 suburban districts, and 2 island districts with 70 wards, 10 towns, and 148 communes [2]. In 2018, the city's gross domestic product (GRDP) (at 2010 constant prices) reached VND 154,712.7 billion, increasing 16.27% compared to the same period in 2017, exceeding the 2018 plan (planned to increase by 15%). This is the highest increase ever, ranking second in the country when the average GRDP growth rate is 16.27% per year; and the GRDP per capita in 2018 was approximately 4000 USD [2, 3]. The Covid-19 epidemic has had a significant impact on the economy of Hai Phong, as it has on the economies of other cities. Nonetheless, with proper solutions, the city's economy (GRDP) is expected to grow by 12.32% in 2022 compared to the same period last year, ranking eighth in the country and second in the Red River Delta [2]. In 2022, the city's economic growth was strong, exceeding 1.5 times that of the national average. In 2004, the government in Hai Phong invested in a public transportation system (GTCC) with two bus routes. Following more than 18 years of expansion, the number of bus routes gradually expanded until 2010 with 14 routes [4], then gradually fell to 10 bus routes by 2019, 8 by 2020, and recently only 10 routes are in operation. From 2010 to 2016, the number of public passenger transport passengers increased from 5.5 million to 7 million, then declined drastically in 2018 to 2.7 million passengers, then in 2021 to 2.5 million passengers [5, 6]. The route data and volume of public passenger transport reveal that the city's public transportation is inefficient and underdeveloped, with just approximately 1% of the population using it [6]. Several studies have been conducted to improve the situation, such as adjusting the planning of public transportation by bus in Hai Phong City between 2012 and 2018; and policy solutions. Yet, there is still a drop in the number of routes and the volume of transportation. Therefore, it is necessary to learn more about this problem and find out the cause to get effective solutions. In this study, the authors will explore the current status of the public transport system in Hai Phong City, including the bus route network, vehicles, and service infrastructure namely stops, signage, etc. We also evaluate and assess the current situation to identify existing problems, the reduction causes of routes as well as the amount of passenger transportation. After that, remedies are given to increase the attractiveness of the bus public transportation system in order to encourage people to utilize buses for daily travel. To achieve the research purpose, the authors adopted a qualitative method, specifically, performing synthesis, comparison, descriptive statistics of documents, combining investigation and practical survey, collecting data from annual reports on public passenger transport activities (bus in particular). Then, using the content analysis approach, extract the required data and evaluate the effectiveness of public transportation operations before proposing measures.

2 The current state of the public transport system in Hai Phong city

2.1 Public transport planning of Hai Phong city

2.1.1 Public transport planning of Hai Phong city in 2025 and vision to 2050

In 2009, the adjustment of the general construction planning of Hai Phong city to 2025 with a vision to 2050 was authorized. For the first time, the city of Hai Phong's public transportation strategy was directed. According to this plan, there will be 34 bus routes, including intra-provincial routes, inner-city circles, and nearby routes, by 2020. By 2025, 12 more bus routes will be developed along various routes. radial and belt structures. Urban
railway: There are six lines in the urban railway transit network that are anticipated to be subterranean and floating, totaling around 152.0 km [8].

2.1.2 Planning for bus-based public passenger transportation in Hai Phong City

In 2007, Hai Phong developed the bus network for the city's public transportation till 2010, with an eye toward 2020. (Plan 2007). In accordance with this schedule, the city will possess 30 bus routes (including 4 BRT routes) by 2020, which will be able to accommodate 10-15% of travel demands, up from the objective of 18 public transportation routes in 2010 to fulfill 7–10% [4]. With 14 bus routes, Hai Phong declared in 2012 that it would build public passenger transportation by bus in the city from 2012 to 2016 to accommodate 4-6% of travel demand. A total of six new routes will be added between 2016 and 2020, bringing the overall number of bus routes to 20, which will serve 10 to 12% of the population's travel needs [4]. In 2018, Hai Phong authorized a revision to the master plan to expand the city's public bus transportation system until 2025, with a focus on 2030. In the spirit of this plan, Hai Phong will operate 22 bus routes between 2017 and 2020, including 1 inner-city circular route, 20 intra-provincial routes, and 1 adjacent route. From 2021 to 2025, it will operate 9 additional bus routes, including 1 inner-city circular route, 4 intra-provincial routes, 2 internal routes of VSIP Industrial Park, and 2 adjacent routes. From 2026 to 2030, it will run 6 additional intra-provincial routes and 1 adjacent route, bringing the total number of public transport routes in Hai Phong City to 38 routes [4].

2.1.3 Planning for Bus Rapid Transit (BRT) in Hai Phong city

The development orientation of bus rapid transit (BRT) routes in Hai Phong city by 2030 includes 4 routes: in the period of 2017-2020, 1 route will be operated from the center to Do Son; in the period of 2021-2025, operate one more route Bac Son/Nam Hai-Eastern bus station; In the period 2026 - 2030, two more routes will be operated Bac Son - Northern bus station and Northern bus station - Eastern bus station [4].

2.2 Bus route network

Presently, the sole mode of public transportation in Hai Phong is the bus. There are 10 bus lines in operation. Bus routes mainly depart from the center to suburban areas, with a total length of 223.6 km [6].
2.3 Bus station and bus shelter

There are about 590 stops, 81 shelters, and 03 bus ticket offices currently. The number of bus stops with shelters accounts for approximately 13.7%. The average distance between stops is 4.1 km in the inner city, and 1.1 km in the suburbs [5]. According to the investigation, bus stops in Hai Phong are not up to technical requirements. In detail, there is a lack of route information and signs, identification information is not clear and inaccurate. At many stops, signs are attached to power poles, that investment needs to be replaced. Stops and shelters are not regularly maintained, renovated, and embellished, leading to degraded quality such as broken or old fading. The stops only have marks, causing unsafety for passengers and road users.

Additionally, the signal signs at the stop and shelters are ill-equipped, neglected, and under-invested. Numerous signs have been damaged, such as the loss of a pole sign that was not rebuilt, or the sign having to be mounted to a power pole that did not meet the criteria. Several shelters were occupied for trading [5].

2.4 Parking lot, starting point, end point

Statistics show that the total parking area is 3,745 ha, of which 0.3 ha is self-owned by the firm, 3,015 ha is granted by the city, and 0.43 ha is leased. The parking lots and garages of bus transport companies are primarily set up by the transport units themselves, with the exception of the parking lot at Dinh Vu Industrial Park, which is allotted to the Guangdong Commercial Transport Joint Stock Company and An Lao parking lot invested by the government, while the remainder is owned by enterprises or rented [7]. There are now 18 bus starting and ending points in operation in the city; these points are located at bus stations, industrial parks, ferry terminals, post offices, some points using roadbeds with limited painted lines [5].
2.5 Vehicles

Currently, in Hai Phong city, there are 04 enterprises participating in public transport by bus with a total of 79 vehicles [6], specific years of operation as shown in Table 1.

<table>
<thead>
<tr>
<th>No.</th>
<th>Line number</th>
<th>Line name</th>
<th>Vehicle Quantity</th>
<th>Type</th>
<th>Operated year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01</td>
<td>Cau Rao – Du Nghia</td>
<td>8</td>
<td>TRANSINCO-B55</td>
<td>2004</td>
</tr>
<tr>
<td>2</td>
<td>02</td>
<td>Ben Binh, Cho Kenh – Vinh Bao</td>
<td>13</td>
<td>TRANSINCO-B55, B60</td>
<td>2016</td>
</tr>
<tr>
<td>3</td>
<td>03A</td>
<td>Do Son Post Office</td>
<td>10</td>
<td>SAMCO-B50</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>03B</td>
<td>Dau Khi – Do Son Hotel</td>
<td>12</td>
<td>SAMCO - B50</td>
<td>2005</td>
</tr>
<tr>
<td>4</td>
<td>04</td>
<td>Minh Duc Post Office</td>
<td>5</td>
<td>TRANSICO - B40</td>
<td>2006</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>Pha Lai Xuan – City Post Office</td>
<td>4</td>
<td>TRANSICO - B40</td>
<td>2005</td>
</tr>
<tr>
<td>6</td>
<td>13</td>
<td>Cat Ba Center – Pha Gia Luan</td>
<td>4</td>
<td>Mechanical 01-5 - B40</td>
<td>2008</td>
</tr>
<tr>
<td>7</td>
<td>14</td>
<td>Cat Ba Center – Cai Vieng</td>
<td>4</td>
<td>Mechanical 01-5 - B40</td>
<td>2008</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>Nga 5 Cat Bi – Nga 3 So Dau</td>
<td>5</td>
<td>TRACOME CO - B40</td>
<td>2015</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
<td>Le Hong Phong - Ngo Gia Tu intersection – song Hoa pontoon bridge</td>
<td>10</td>
<td>SAMCO – B50</td>
<td>2006</td>
</tr>
<tr>
<td>10</td>
<td>19</td>
<td>Inner Tien Lang district: Cong Roc - Tien Lang Post Office</td>
<td>4</td>
<td>SAMCO – B50</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>79</td>
</tr>
</tbody>
</table>

According to data, more than 50 buses have been in service for more than ten years. Buses have been in use for a long time and have degenerated, so they spew black smoke that harms the environment and does not provide a visually appealing picture. The vehicle's utilities have deteriorated.

2.6 Information

Route information: limited to announcements at bus stops and shelters. Nevertheless, only route information is provided, with no indication of the bus's route, frequency, or departure times for the first and last trips. Only a few locations have a shelter that offers a route map. Customers, however, cannot use this route map because it is outdated, and certain routes have changed [5].

Bus vehicle information: only some vehicles are equipped with a GPS device. No passenger information to search yet [6]. Thus, information about public transport has not reached passengers or is not complete with basic information, not updated and announced changes. Managers also do not use communication channels to bring information to passengers.

2.7 Bus ticket

Currently, there are two types of bus tickets: one-way tickets, monthly tickets, both in paper form, and the ticket prices are as shown in Table 2:
Table 2. Hai Phong city bus ticket statistics (Hai Phong Department of Transport, 2022)

<table>
<thead>
<tr>
<th>No.</th>
<th>Fee (VND)</th>
<th>Route length</th>
<th>&lt;15 km</th>
<th>15 - &lt;25km</th>
<th>25 – 30 km</th>
<th>&gt; 30km&lt;35</th>
<th>&gt; 35km</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One-way</td>
<td>8.000</td>
<td>12.000</td>
<td>15.000</td>
<td>20.000</td>
<td>25.000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Monthly</td>
<td>200.000</td>
<td>200.000</td>
<td>400.000</td>
<td>650.000</td>
<td>750.000</td>
<td></td>
</tr>
</tbody>
</table>

The City People's Committee also approved a policy exempting children under the age of six, individuals with severe disabilities, and those with extremely severe impairments from purchasing travel tickets. At the same time, people who have rendered exemplary service to the revolution, the elderly, students, and students who are Vietnamese citizens would receive a 25% discount on monthly tickets [8].

3 Assessment of the current status of the public transport system by bus in Hai Phong city

3.1 Route development

According to the city's general plan to 2025, the Hai Phong public transport system has 4 BRT lines and 6 urban railway lines [9], but the city has yet to develop and deploy construction investment. Only public buses run by public and commercial enterprises service the travel needs of residents in Hai Phong. From 2004 to the present, the city's public transportation bus system has gone through various stages, growing rapidly until 2008 before gradually decreasing and now there are only 10 routes [6,10].
Table 2. Hai Phong city bus ticket statistics
(Hai Phong Department of Transport, 2022)

<table>
<thead>
<tr>
<th>No.</th>
<th>Fee (VND)</th>
<th>Ticket type</th>
<th>Route length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>&lt;15km</td>
</tr>
<tr>
<td>1</td>
<td>8.000</td>
<td>One-way</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>200.000</td>
<td>Monthly</td>
<td></td>
</tr>
</tbody>
</table>

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Table 3. Details of public transport system by bus in Hai Phong per period
(Author's synthesized, 2023)

<table>
<thead>
<tr>
<th>Period</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 - 2005</td>
<td>There are 02 bus routes in the city, namely bus route number 01 Cau Rao - Du Nghia (2004) and route number 02 Ben Binh - An Trang intersection (2005), invested by the state.</td>
</tr>
<tr>
<td>2005 - 2008</td>
<td>15 more bus routes were opened by non-state enterprises approved by the City People's Committee in the form of socialization</td>
</tr>
<tr>
<td>2012 - 2016</td>
<td>The number of bus routes has dropped since many routes have ceased operations for a variety of reasons, including: revenue from bus ticket sales is insufficient to pay operating costs, and quality is not assured. There are 12 routes left in 2016.</td>
</tr>
<tr>
<td>2017 - 2022</td>
<td>Several modifications have occurred, including the addition of routes 2.1 (An Lao - Vinh Bao) and 2.2 (An Lao - Tien Lang), the merger of routes 03A and 03B into line 03, and the discontinuation of business as lines 07, 13, and 14. Also, the Covid-19 epidemic had a significant impact during this time period. Lockdown measures, travel prohibitions, and the fear of disease while utilizing public transportation paralyze the transportation industry. Upon shifting to the post-covid phase, traffic resumed normally, but public vehicles were still not picked, resulting in the shutdown of four routes. The city launches two new routes in 2022, leaving just 10 bus routes in the city; the entire length of the route network is 223.6 km, operation hours are 4:30 to 20:45 daily, the frequency of operation is from 15 - 40 minutes, with 599 vehicles/day. (about 10% of Hanoi with 136 routes and Ho Chi Minh City with 128 routes) [1, 6].</td>
</tr>
</tbody>
</table>

The aforementioned phases are associated with the phases that are focused on the city of Hai Phong's plans for public passenger transportation. According to the analysis's findings, more routes will really fail to grow in accordance with the master plans' aims between the years of 2010, 2016, 2019, and 2020, as shown in Table 1. Although the local administration has modified the planning and lowered the public transportation standards, the actual situation and aims in planning adjustment reveal that there is a too great a gap between reality and planned.

Regarding to the coverage of the current bus route network, Hai Phong city only has 78/223 communes and wards with buses passing (accounting for 35%). Certain parts have a high coefficient of line overlap, and there is no defined hierarchy of inner-city circles and connecting routes, which has an impact on the efficiency of bus operations. The route network is not properly planned, the network density is low, the connectivity is not high, most of them are radial routes from the inner city to the suburbs and vice versa (accounting for about 70% of trips) [11]. The bus network's coverage is not consistent; attractions and important travel requirements such as industrial parks, hospitals, schools, residential neighborhoods, tourist locations, and so on are not covered, making bus travel inconvenient. Furthermore, certain bus routes pass through numerous local traffic jams during peak hours, as well as inappropriate traffic separation and lane separation, prompting buses to alter routes, generating confusion and discomfort, and leading to a decline in the attractiveness of the service to customers. [12, 13, 14]
3.2 Infrastructure quality

Public transport by bus during operating time has outdated equipment, and the infrastructure required for their operation and exploitation is under poor condition. Many infrastructures have also been compromised or invaded and have not been renewed or replaced.

Figure 2. The diagram comparing the number of bus routes between the plannings and the actual situation

Figure 3. Stop point structure chart
The bus stops fail to meet the technical requirements since they lack route information, have no signs, or have unclear identification. Many stops also need signs that can be affixed to power poles. The shelters aren't frequently updated, renovated, or decorated, which results in deteriorated quality and unauthorized intrusion. Statistics show that 78% of stops have signs, 20% have shelters and signs, and the remaining 2% are stops with only lines [5]. On the same route, each unit places its own, inadequate sign system, making it challenging for passengers to recognize. Additionally, there are no facilities at bus stops to help those with disabilities to get accessed to buses. Improper arrangement of parking lots leads to large vehicle mobilization, which has an impact on service quality, raises operational expenses, and decreases the business efficiency of bus transportation companies. There are only 5/18 bus terminals in operation in the city (accounting for 21% of those invested and created by the city to satisfy terminal criteria). The rest is provided by the firms themselves; construction expenditure is inadequate, and the majority of buildings lack maintenance and repair rooms [5].

![Figure 4. Vehicle structure chart by year of operation](image)

The fleet's quality is inadequate; the majority of the vehicles have been in service for over seven years (92.5%), while 28.3% of them have been in service for over seven years. 10 years [5]. The majority of the vehicles are over ten years old, have poor emission requirements, and have degraded facilities. When they travel on roadways, they emit black smoke that seriously pollutes the environment. Most buses lack amenities for the disabled. Passengers are also confused by the imprecise, limited, and irregularly updated information concerning public transportation. This is a major barrier to people using public transportation, as passengers find it challenging to select the most convenient and effective route.

Infrastructure is unfocused, and poor service quality causes passengers to feel unsafe, inconvenient, and uncomfortable throughout their journey, or, in other words, dissatisfied with the bus. As a result, many do not choose to utilize public transportation [13, 14, 15]. The mentioned explanations help clarify why there are fewer bus routes throughout time. Due to their inability to offer the necessary high-quality service and a lack of sufficient money to cover operating costs, the routes had to cease operations.

### 3.3 Impact on the volume of public passenger transport

The current state of the deteriorated bus public transportation system diminishes not only the number of bus routes but also the amount of passenger transportation. The amount of passenger travel declined from 7 million passengers (in 2016) to 2.8 million passengers in 2017 [5, 10]. There are reasons of quality in addition to the cause of deteriorating infrastructure. Until now, the infrastructure and bus vehicles that have been in use for more
than ten years have been severely eroded but have not been replaced, creating a negative image in the city and among the people, which results in an impact on their choice of using public transport [10, 14]. Nevertheless, ticket costs remain high in comparison to people's income (accounting for roughly 7-9% of typical income) and higher (1.5-3 times higher) than in cities like Hanoi, Da Nang, and Ho Chi Minh City [14]. In 2018, the Hai Phong City Department of Transportation decided to cease the operation of three bus lines (Nos. 05, 07, and 09), citing poor service quality [6, 8].

In 2019, the number of passengers on the road fell to 2.5 million. The consequences of the Covid-19 pandemic and illness preventive efforts from 2019 to 2021. As we enter the period of recovery and the normality, the volume will reach 2 million passengers in 2022 [6]. The shift throughout this time period indicates that public transportation in Hai Phong city has diminished and is no longer appealing to passengers. Customers, because people no longer take buses for commuting purposes [13, 14, 15].

**Figure 5.** Volume of public passenger transport in Hai Phong

Generally, problems such as deteriorated infrastructure and vehicles, ambiguous information, limited accessibility, expensive ticket costs, and so on make public transportation unappealing. Citizens do not want to utilize it, thus they do not make the bus a habit. These results are also consistent with previous studies on the choice of using public transport [12, 13, 14, 15]. To raise the attractiveness of the public transportation system, methods to address the aforementioned elements are required.

### 4 Solutions to improve the attractiveness of the public transport system in Hai Phong city

Currently, public transport by bus in Hai Phong only meets < 1% of travel demand. To achieve 7-10% by 2025, Public transport needs new breakthroughs to improve the attractiveness of public transport for people. The authors would like to offer some key policy implications as follows:
4.1 Implementing policies to support and foster the usage of buses.

The author advocates adding three more topics to obtain a discount, including 25% off monthly public transportation tickets in Hai Phong city for those with modest impairments and workers in industrial zones. Particularly, reducing by 50% for low-income households. It is suggested that tickets be made available for free to the elderly when taking public transportation in Hai Phong (over 60 years old). The inclusion of objects with discounts and free bus trips would boost the appeal of public transportation to various classes of society, displaying the diversity of passengers, justice in society, and accessibility of public transportation to all members of the community. Since people in Hai Phong are not in the habit of taking buses, measures to develop people's bus habits, such as free bus trips at a certain period with the full network or a few defined routes, are recommended. For example, it is free to take the bus from 13:30 to 15:00, while routes to tourist sites such as Do Son are free from 19:30 to 22:00 on Fridays. Operators might be claimed as well. They provide free routes and hours suggestions based on data reports. This approach, when paired with the solution of free parking at transit locations, may be described as a significant improvement that will attract people and build a habit of walking and using the bus. This is referred to as the foundation solution.

4.2 Promoting trade and advertise

Passenger service and commercial advertising aboard Hai Phong city's public transportation vehicles are now unfocused. They have not yet invested in creating passenger services at transit stations or terminals. To improve passenger comfort, Hai Phong City could investigate allowing business at transit stations, terminals such as vending machines, other required services, or providing free internet. Passengers desire to meet emergent demands such as eating, entertainment, environmental cleanliness, etc., in addition to satisfying travel needs such as speed, safety, convenience, and dependability, especially on long-distance routes. This measure also provides passengers and operators with additional revenue streams in addition to ticket sales.

Advertising is also incredibly profitable, with adverts allowed at bus stops, in vehicles, and even while checking in via free wifi. As Hai Phong bus public transportation network includes 18 terminals and about 300 waiting stations, advertising income is enormous. Advertising on public transportation vehicles and in infrastructure has been reviewed in recent years to provide great commercial efficiency and image promotion. As a result, advertising in public transportation operations is gradually becoming a demand and a trend. These are income streams that assist transportation firms in resolving severe financial issues. This flexibility provides transportation businesses with the financial resources to improve quality and brand image while making passengers' journeys more comfortable.

4.3 Branding and positioning

For the inhabitants of Hai Phong, the vision of public transportation is indeed hazy. Hence, building a brand and an image is essential for both short-term and long-term consequences.

Firstly, developing a brand and image through transportation requires urging that transportation firms update outmoded vehicles. Perform routine upkeep and replacement. Decrease environmental pollution and noise. For persons with impairments to board the bus, vehicles must be equipped with technological features including wheelchair parking.
undercarriage, etc. The priority ought to be on creating a brand image through the use of colors and logos on moving vehicles that are green [7].

Secondly, Establishing a company's reputation and brand through media, communication, and marketing requires that passengers receive adequate information, that information channels be of greater quality, that a hotline be available, and that complaints be handled as promptly and effectively as possible.

Thirdly, Developing brand and image through infrastructure repair and improvement: Existing infrastructure lacks focus, has signs that are either missing or in poor condition, is unclear and difficult to visualize, and has small parking garages. Thus, it is essential to upgrade the infrastructure for public transportation. Invest in creating the infrastructure needed to provide accessible public transportation. Spend capital on creating attractive waiting areas that leave an impression on visitors. The company's image and brand will be most prominently displayed to passengers through this department, so there must be a clear reward and punishment system.

Finally, enhancing a company's reputation and brand by having service staff as drivers, car assistants, ticket salespersons, switchboard operators, or hotline operators function in a modern, courteous manner. To guarantee that human resources meet the essential standards for training, well-being, communication skills, and behavioral expertise. The human resources team in charge of managing public passenger transportation by bus should set up training sessions and seminars to exchange ideas and advance their professional credentials, with an emphasis on teaching them how to handle emergency circumstances. Operating causes mutations to occur. The primary goals of the training are to raise awareness among this direct workforce and improve service quality while boosting professional ethical responsibility for drivers, helpers, etc. Provide the team of co-drivers with professional qualifications in the area of the bus and public passenger transportation.

5 Conclusion

Investigating Hai Phong’s public transportation system allow us to draw the conclusions and implications regarding public transportation system. For instance, infrastructure and transportation are degrading and improper invested are the culprits of the unattractive of public transit's unattractiveness, since its image is too hazy and requires improvement. It is vital to increase awareness and cultivate the habit of using the bus by enacting encouraging and fee-supporting policies. The proposed solutions are more competitive in terms of time because other solutions such as adjusting the planning, investing in the development of the route network to be implemented require more resources. At the same time, they are forward-thinking and serve as the framework for the effective implementation of additional long-term solutions. This research is important for all levels of government in charge of the public transportation system in Hai Phong, and in Vietnam in general. Nevertheless, this article primarily focuses on investigating and proposing ideas to enhance the image of public transportation in the city, with less criteria for studying the status of the administration of the public transportation system in Hai Phong city or other relevant materials. The author intend to fill this gap in futher studies.

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