

## Intermodal Passenger Transportation Industry: Development Factor in The Tourism Sector

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### ABSTRACT

**Purpose:** The purpose of this research paper is to highlight the importance of intermodal passenger transport in the tourism sector. This paper describes the intermodal transportation system and how it has developed the tourism sector.

**Research methods:** Qualitative methods are used in this paper. Data was collected from different online sources, such as Streamline journals, related to transport and tourism.

**Results and discussion:** The result of this research paper shows that the development of the tourism sector, along with the intermodal passenger transportation sector, which is the key factor in the development of the tourism sector. This research paper connects the intermodal transportation system to the tourism sector. The intermodal transportation industry is one of the critical sectors of development in the tourism sector. The use of intermodal transportation is a typical daily routine for tourism.

**Implication:** The advice given to the future researcher and transportation, travel, and tourism company to highlight the intermodal passenger transportation system to add more advantages to both the transport company and the travel and tourism company. Through this paper, future researchers can easily connect intermodal transportation to the tourism sector.

**Keywords:** Intermodal, Transportation, Tourism, Place, Sector.

### INTRODUCTION:

Location, natural, historical, and cultural resources are the critical elements to developing the tourism industry. For better communication from one place to another, the transportation system is counted as a development element in the tourism sector. Especially the intermodal transportation industry, which helps to develop the tourism sector. Interconnection with the transport industry

helps to develop the tourism industry. The development of the tourism sector is interconnected with the intermodal transportation process. For convenience, intermodal transport is of broad interest in the tourism sector. Intermodal transport is related to both passenger and freight systems. Intermodal combines several modes of network. It enhances the overall performance of the passenger by using environmentally friendly modes. In the modern era, intermodal transportation and sustainability are changing rapidly as they improve the tourism sector. Intermodal passenger transport competition level on the market provides the touristic destination affects the travelers' choices. This kind of tourist choice helps to increase the development of the tourism sector. The intermodal passenger transport process starts with the arrival of an empty passenger transport at a fixed location. The passenger transport back transport is loaded with the passenger. By this process, passenger can reach their final destinations (Zhenhub, n.d.) Intermodal transportation service is one kind of tool that improves the quality of tourism services (Kordzaia). Transport development means the development of the tourism sector. The development of tourist transport in national ways impacts the international tourism sector. Any country that aims to provide good quality transport among this country it will directly affect tourists as well as tourism development. The primary element of tourism development is to develop the intermodal transportation sector. To reach the goal of tourism development, one should analyze the condition of passenger transport in the country. Bus stations, railways, and metro stations are intermodal passenger transport that have a specific station. Often, it can be multimodal, like buses and trains, which may be counted as a transport hub, which highlights the inbound tourism sector (Nikolova, 2014). Tourism sector development and intermodal transportation are interconnected. It is a standard process from the development of the tourism sector. The intermodal transportation system is counted as an essential factor in tourism development. For the tourism sector, the development of transport is given priority. Intermodal transport station development, the necessity of different services, planning, and other elements are critical factors for the development of tourist satisfaction. Intermodal passenger transport, development, and their significance for serving tourist flows are connected. Intermodal passenger transport involves using two or more modes of transport in a journey. Due to modern technology, the EU transport policy in the intermodal transport sector tries to improve intermodal transport services because they are very environmentally friendly. In the area of freight transportation, the sector must be supported for intermodal transport. EU transport policy perceived that intermodal transport system for tourism is more reliable and more technologically benefits (Bibiána Buková, 2024).

One of the most critical sides is the development of tourism in the planning and development of the transportation sector. Mobility management of transportation may build sustainable cities (Antoni Domènech, 2023). There is a tremendous amount of potential to increase the volume of passenger transportation through the integrated system; for tourist destinations, quality transport service is one of the best factors. For affordable prices, passengers choose intermodal transport. That is why integrated transport should be applied in the transportation sector to highlight the tourism sector (L., 2023). Basically, intermodal transportation is single-mode transport; sometimes, it combines various modes to get more advantages. Intermodal transportation contributes to the economic conditions. It is also environmentally friendly. Sometimes, it is

considered more sustainable rather than road transport. It is more attractive and safer; that is why tourists feel comfortable and get pleasure from these modes. Intermodal transportation helps to highlight the tourism sector. A combination of different intermodal modes is needed to maintain scheduled transport services. It should be because sometimes it disrupts the tourists. A natural time decision support system is based on a hybrid simulation optimization approach from an intermodal transportation system. Real-time data combines offline planning by replanning the transport networks (Martin Hrusovský, 2021). Intermodal transportation analysis is based on the traffic and initial data for the development of the intermodal transportation model. In modern times, data on model intermodal transportation has been improved (Vasiliauskas, 2011). Intermodal transportation services are based on some actors like post operators, terminals, rail operators, transport logistics, corridors etc. It also develops the intermodal transportation market for tourists (Hamid Saeedia, 2017). Intermodal freight transportations mean a multi-modal chain of container --transportation services. This chain usually links the initial shipper to the door-to-door service and takes place over long distances (Teodor Gabriel Crainic, 2005).

Intermodal transportation means two or more different transport modes are combined. Therefore, at least one transshipment takes place, and the main haulage is not carried out by road but by rail or water, while trucks/lorries are used for the initial and final legs of the goods movement (Andrea Ricci, 2005). Logically, it has been proven that the transportation system is a critical factor in the development of the tourism sector. Intermodal passenger transportation is one kind of transportation of passengers, luggage, and handbags from the initial place to the final destination with the combination of several transportation modes, which is responsible for the entire process of transformation from one place to another place, process, conjunction, operator and third-party operator (Anzor Devadze, 2017). All intermodal modes are more flexible, and the main aims of the intermodal passenger transport service are to be as smooth as possible for the passenger by allowing them to access valuable information, have an innovative ticketing system, and travel safely and sound. Implementation of an intermodal transport system increases route choice and offers comfortable services to enhance the transport system for travelers (Nikolova, 2014). Improving intermodal connectivity may enhance travel and communication. It also enhances the local economy of rural areas. Intermodal transport, such as buses, trains, air, buses, and private buses, has increased gradually and developed many advanced economies, connections, and collaborations between these networks (Ryosuke Yashiro, 2019). The use of cars and bicycles can reduce traffic congestion (Maria Morfoulaki, 2023).

The role of intermodal transport on tourist visitation to peripheral attractions that are not directly connected to the metro system. i) tourist preferences toward transport services, ii) perceived level of ease for intermodal transport, and iii) the influence of direct transport access on switching behavior. (Lorenzo Masiero, 2023) Air-to-rail intermodal travel (ARIT) is an intermodal travel system that helps passengers to achieve their intended journey in multiple steps by using flight and railway, which helps to expand the coverage of transportation stations and provide rich intercity travel options for the tourists or passengers (Yifeng Ren, 2023). Travelers prefer the simplest door-to-door travel solution by intermodal transportation. One option to make railway transport more

available is intermodality, which can replace private car journeys for its flexibility and also act as a feeder for railway passenger transport (Daniel Pribulaa, 2024).

Intermodal transport stations in public transport include bus stations, Railway stations, and metro stations. Sometimes multimodal stations like bus and rail count as a transit point. This is a great opportunity for tourists to discover experiences by transport and observe different scenery.

#### RESEARCH METHODS:

The theoretical and methodical base of the research is the publication of streamlined journals in the transportation and tourism sector. The information base of the research is the materials of intermodal transportation systems, transportation agencies, and transport and tourism researchers. Descriptive analysis and qualitative methods were used during the research. For qualitative evaluations, the recent journal was used to perform a comparative analysis of tourism development. Practical recommendations comprise the argument for an intermodal transportation system to develop the country's tourism sector.

#### RESULTS AND DISCUSSION:

The development of a transport system is a necessary condition for the implementation of tourism development. The service quality of passengers is a critical consideration of the intermodal transport system. Which directly influences the tourism industry. Intermodal transportation system provides access to the tourists and expansion the inbound tourism greatly. Intermodal transport system reduce the environment related negatives issues. Intermodal transportation helps to make a good network among the tourists, as a result tourism sectors get more benefits by the intermodal transportation. Intermodal passenger train can transfer tourist with low fuel. It saves the environment carbon emission. The condition of countries intermodal transport infrastructure, the management of passenger transport can highlight the tourism industry in those countries. In the market of transport sector, the development of intermodal transportation means the development of regional area. Today's modern society need more comfort, more secure for travelling. In that case intermodal transport helps to turn into the modern societies. The success of the inbound tourism sector with good quality and service intermodal transport is the precondition of success for the entire tourism industry. Tourism depends on the transport and its safety, speed and comfort. These kinds of factors only possible by using the intermodal transportations. There are three kinds of intermodal transportation mode used by tourist. When they have a plan to visit their desired destinations, they choose these kinds of modes (Table:01). They use individual, shared and public transport to reach their destinations. The above three modes of development mean the development of quality and service for local and foreign tourists. The biggest advantage of an intermodal transport system is that it combines several types of transport modes and helps to grow the local and inbound tourism sector. High effective transport modes are always blessings for the tourism sector.

Table 1. Intermodal Passenger Transport Categories

Individual Transport	Taxi
	Car
	Bycicle
Shared Transport	Rented Car, Taxi
	Motor Cycle
	Mini Bus
Public Transport	Train
	Public Bus
	Fast Speed Rail

[Source: Authors own Creation]

Intermodal transport combined with two or more modes of transportation, for intermodal passenger transport every interchange should be convenient for traveler and it should be choice by the travelers. In the intermodal transport helps to tourists to smoothly interchange. Implementing the intermodal transport in tourism will increase the route choice for the tourists. Tourist service need long distance carriage minimum 100 kilometers. Long distance performance by intermodal transport helps to the economy as well as the develop of tourism sectors.

Travelling process (TP) is important part for ensure the service to tourists. Smooth travelling process helps encourage to the tourist to use the intermodal transport. Travelling process (TP) involves with proper information, agency, route and final destination, counter etc. This is the first process of an intermodal transport system for tourists. The second element of intermodal transport is Quality of Service (QS). It helps to acquire a positive travel experience from tourists. If there is any lacking of service quality by intermodal transportation, it will be a hamper to the tourism industry. All of the modes need a good quality of service for inbound tourism. The last one is financial support (FS). To improve the intermodal transport system, it needs to invest more finance toward the intermodal transport system. These three factors are more important to highlight tourism. These three factors ensure security while they are traveling from their starting point to the ending point (Figure. 1).

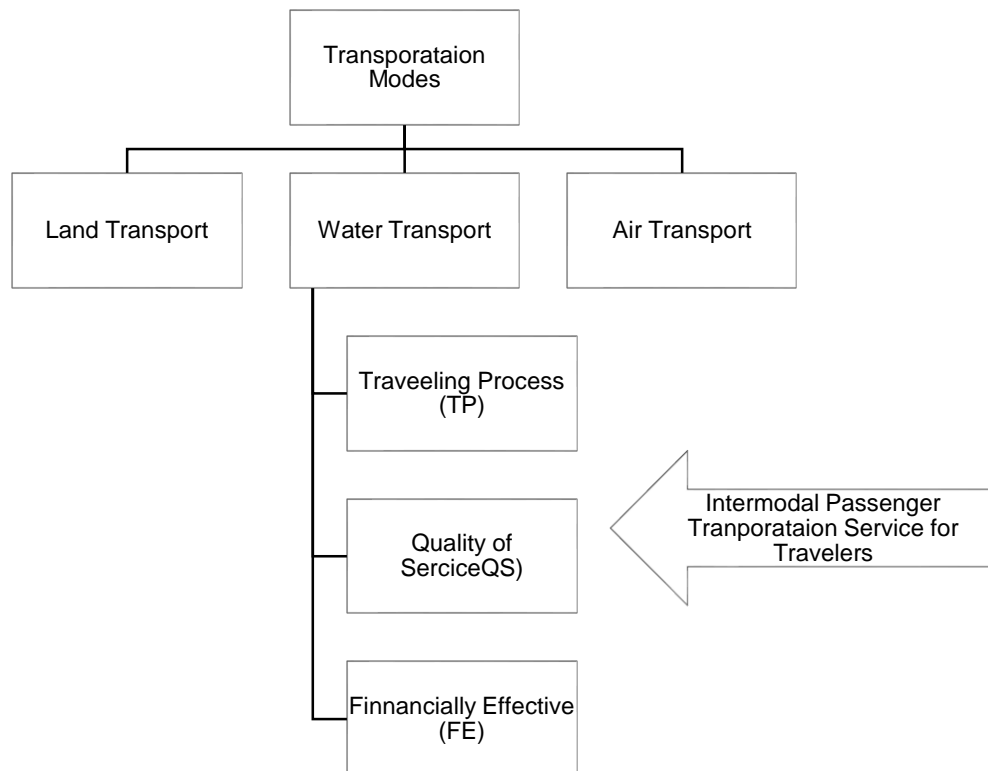


Figure 1. Intermodal Passenger Transportation Service for Travelers.  
 [Source: Authors Own Creation]

The quality of tourist transportation services is high, and their demand for intermodal transportation is satisfied, which means the development of the tourism sector. If the intermodal transportation system has good infrastructure, then it will automatically highlight the country's tourism sector easily because of tourists' satisfaction and travel feedback. Improvement of the transit level, transportation process, and technical improvement are the main elements of the intermodal transportation system. Intermodal transportation is considered when it is combined with the transportation of passengers, luggage and handbags. From the start to the end, different types of transport systems are provided by one document that is responsible for the total process without any disturbance. It should be the service of connection of conjunctions, one specific operator of the transportation brokers.

The role of intermodal transport starts from the tourists (Figure:2). Tourists can buy a ticket together for multimodal transport services or they can buy individual from travel agency or the ticket counter or the online system. Different intermodal transport system there have an online ticking system, they can cut a ticket easily. It saves the time and reduce the hesitation. After the ticketing system, tourists use the different location for visits purpose by the intermodal transport. It is directly influenced by the regional tourism sector or the whole country's tourism sector. When tourist reaches their destinations, they provide feedback on these services, which is a strong point of the tourism sector. The transport industry and the transport companies are directly involved the intermodal transport services. So the tourist and the intermodal transportation have a very good relationship to highlight the inbound tourism sector.

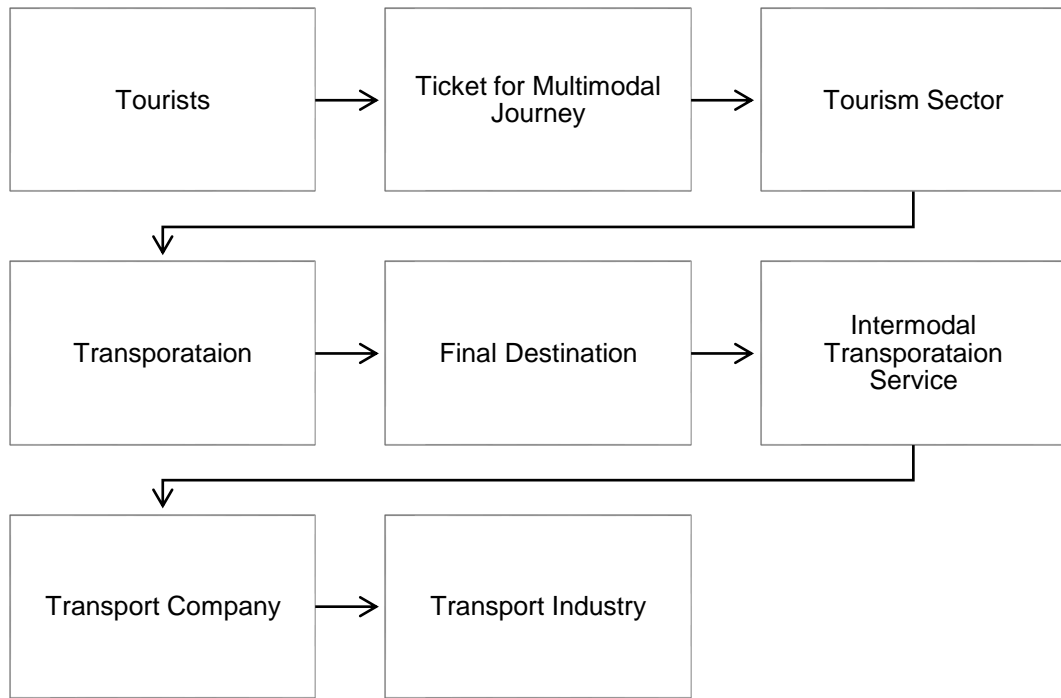


Figure 2. Role of Intermodal Transportation Service  
[Source: Authors Own Creation]

Using intermodal passenger transport by the tourists have a great advantage which helps to grow the inbound tourism sector (Figure:03). For rapid service, lower costs, safety and security tourists preferred to use the intermodal passenger transportation in their journey.

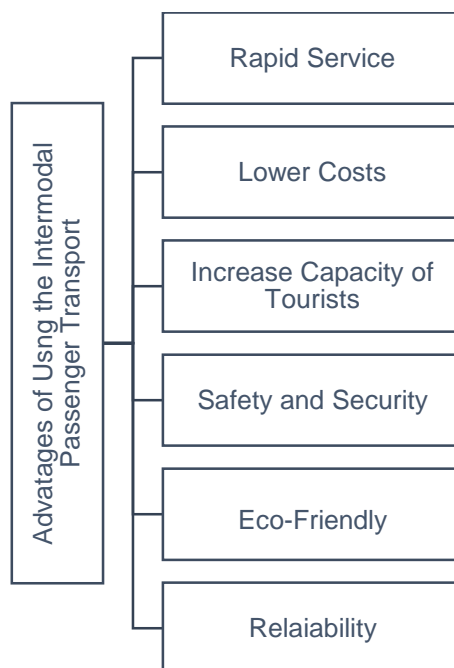


Figure 3. Advantages of Using Intermodal passenger Transport  
[Source: withvector.com]

## CONCLUSION

Intermodal transportation means the transportation of a person or a load from one place or initial place to the final destination by using at least two transportation modes. These activities are performed from one mode to another mode by using the intermodal terminal. Intermodal passenger transportation is one of the best elements for developing the tourism sector. It provides the priority of tourist choice. It is less costly or comfortable for tourists; that is the reason tourists use the intermodal passenger transport system. This paper explores the relationship between intermodal passenger transportation with inbound tourism sector. How can influence by intermodal passenger transport towards inbound tourism sector. Though different previous research paper, journal, blog research article little but this paper explored intermodal passenger transport and the inbound tourism relationship. In the 21<sup>st</sup> century tourism sector is a vast sector all over the world; it contributes to grow the country's GDP, Where transport is part and parcel of the tourism sector. TP, QS, and PS are the effective factors to improve the intermodal passenger transport system for tourists.

The findings of this research paper will provide educators and lecturers with ideas for providing teaching and learning resources for students. Future researchers can use a combination of intermodal passenger transport and inbound tourism sectors by using these findings. This paper will help the learner hold their focus more quickly and effectively by using this research paper. This research paper also provides the categories of intermodal passenger transport categories connected with inbound tourists. Also, it discusses some factors which are very effective to apply in the inbound tourism sector. It also suggested that future studies can draw connections between intermodal passenger transport and the inbound tourism sector.

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