

## Socio-Economic Benefits of Highways (DCT) in Vietnam

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### Abstract

### Original Research Article

Green transportation and green tourism have been developing together with positive impacts from highways development so there are socio-economic benefits of highways (DCT); esp. In regions in each country, including Vietnam. However, there are very few complete and systematic studies on the socio-economic benefits of exploiting DCT. Therefore, this paper will show again highway also contributes to promoting sustainable tourism, minimizing the negative impact of tourism on the environment and people's lives.

**Keywords:** tourism, highways (DCT), benefits, solutions, development issues.

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## 1. INTRODUCTION

Xin *et al* (2020) stated with the integrated development of transportation and tourism, building tourism highways has become a new direction leading the transportation industry and also an important sector of green transportation. Currently, the planning, design and construction of tourism highways in China are at their early stage, and there are few relevant codes, specifications, and standards concerning the planning and design.

The need to manage investment projects is becoming higher, which is reflected in the need to translate documents from foreign languages into Vietnamese. In 2004, the Ministry of Finance and the Asian Development Bank published "Manual on Financial Issues in Official Development Assistance Projects in Vietnam", published by Finance Publishing House.

We see previous studies:

Table 1 - Previous studies

Authors	Year	Content, results
Pearce Anthony	2006	published a notable article titled "Issues raised in the international integration process of Vietnam's road industry" in Transport Magazine No. 1 and (p. 86 – 95), in which he analyzed quite appropriately the issues that Vietnamese traffic needs to raise in order to develop the road system, including the role of highways
Gartner <i>et al</i>	2004	Results indicated that road travelers were able to differentiate between physical and socially derived attributes and amenities associated with a particular roadway. Roads do have character, and users are able to identify and evaluate characteristics specific to each road segment. Many roadway features related to maintaining scenic and environmental qualities were highly valued. Users are not supportive of additional business development along some roadways and prefer instead that activity be clustered in communities located on the road segment. Results also indicated that even though a particular roadway may not have had official scenic designation, user

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Authors	Year	Content, results
Soriguera	2014	evaluations were similar to those with such designation or even more focused on scenic qualities After the widespread deployment of <u>Advanced Traveler Information Systems</u> , there exists an increasing concern about their profitability. The costs of such systems are clear, but the quantification of the benefits still generates debate. This paper analyzes the value of highway travel time information systems. This is achieved by modeling the departure time selection and route choice with and without the guidance of an information system. The behavioral model supporting these choices is grounded on the expected utility theory, where drivers try to maximize the expected value of their <u>perceived utility</u> . The value of information is derived from the reduction of the unreliability costs as a consequence of the wiser decisions made with information. This includes the reduction of travel times, scheduling costs and stress.

(source: author synthesis)

The benefits obtained, however, are not reported in such quantitative terms. It is usually claimed that travel time information is the most valuable traffic information for drivers (Palen, 1997), because it allows for making better decisions (e.g. route, mode and departure time selection) and it reduces the uncertainty drivers face

## 2. METHODOLOGY

Authors use mainly qualitative analysis, inductive and synthesis methods Combined with historical methods.

## 3. MAIN FINDINGS

### Tourism development and socio-economic benefits of highways

Tourist arrivals are expected to increase by about 40%.

As soon as the Ministry of Transport officially opened the two highway sections of Vinh Hao - Phan Thiet and Nha Trang - Cam Lam to traffic on May 19, many tourism businesses and people expressed excitement. Because the journey from Ho Chi Minh City to the South Central coastal provinces has shortened the distance and time significantly.

According to Mr. Nguyen Van Khoa - Chairman of Binh Thuan Tourism Association, after opening the Dau Giay - Phan Thiet expressway, the travel from Ho Chi Minh City to Phan Thiet (about 200 km) has been shortened by nearly 120 minutes (from about 4 hours 30 minutes to about 2 hours 30 minutes). Thereby, the number of tourists from Ho Chi Minh City to Binh Thuan has increased significantly compared to before.

"Thanks to shortening the travel distance, during the April 30 - May 1 holiday, Binh Thuan tourism welcomed about 160,000 visitors and stayed, doubling compared to the same period in 2022. The average room capacity is about 70 - 90%, estimated revenue is about 230 billion VND.

During the summer tourist season of 2023, we expect the number of visitors to Binh Thuan will increase sharply. Accordingly, the number of tourists coming to Binh Thuan in 2023 may increase by 40 - 50% compared to the plan of 6.7 million visitors."

Up to now, there have been about 240 km of highway connecting Ho Chi Minh City and Vinh Hao, Tuy Phong district, Binh Thuan province instead of traveling more than 280 km along National Highway 1A. In particular, highways have helped drivers shorten the journey time from 150 to 180 minutes.

In addition, nearly 50 km of Nha Trang - Cam Lam expressway has also been put into operation, helping to significantly reduce the travel time of vehicles from Ho Chi Minh City to Nha Trang - Khanh Hoa.  
(source: kinhtedothi.vn)

My Thuan - Can Tho Expressway will help shorten travel time from Ho Chi Minh City to Can Tho to only about 2 hours, reduce congestion, limit traffic accidents and save transportation costs. This is an important factor to improve competitiveness, attract investment and develop tourism in the region  
(source: baomoi.com)



**Fig 1 - My Thuan - Can Tho highways and my thuan bridge**  
(source: internet)

Next, the completion of these transportation infrastructure projects not only simply improves the transportation network but also opens up new opportunities for tourism development in the region. According to experts, expressways help "redraw" the tourism map, creating many new destinations, new products and many new types.

The highway also contributes to promoting sustainable tourism, minimizing the negative impact of tourism on the environment and people's lives. Expressways reduce emissions, noise and waste generated by traffic, protecting the environment and landscape. Expressways also help distribute tourist flows, reduce pressure on overcrowded tourist destinations, and improve service quality and tourist experience  
(source: tcdulichphcm.vn)

Also, for the Tuyen Quang - Phu Tho Expressway Project, 40.2 km long, connecting to Noi Bai - Lao Cai Expressway with 4 lanes, maximum operating speed of 90km/h with a total investment of more than 3.7 thousand billion VND starting from February 2021. This is one of the important projects assigned to the local

People's Committee of Tuyen Quang province as the investor.

Immediately after being assigned the task, Tuyen Quang province made efforts together with Phu Tho province in mobilizing site clearance and implementing investment and construction work, which finished early as planned. When put into use, the project will conveniently connect the northern mountainous provinces with the capital Hanoi, creating a driving force for comprehensive economic, social, security, defense... In use, the travel time from Tuyen Quang city to Hanoi capital has been shortened from 2 hours and 30 minutes to just over 1 hour.  
(source: baohagiang.vn)

#### **4. DISCUSSION AND CONCLUSION**

**We see:**

Expressways help tourists move quickly, conveniently and safely between tourist destinations, reducing costs and journey time. This creates higher demand for tourism, especially road travel, weekend travel, family travel and individual travel.

The highway also creates connections between tourist regions, enhancing cooperation and coordination between localities in building and promoting tourism products. This helps make the most of the potential and advantages of each region, creating diversity and richness for tourists to choose from. The Ministry of Transport is the state management agency for investment in construction and exploitation of the expressway network nationwide.

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