



**Sustainable Urban Transportation
Index (SUTI) for Twin Cities
Islamabad & Rawalpindi, Pakistan**

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1. Introduction

The Islamic Republic of Pakistan like most other developing countries is facing the issue of rapid traffic growth in metropolitan cities. The capital city Islamabad and its neighboring city Rawalpindi have seen an exponential increase in traffic demand in the last few years. The main reason for this growth is population outbursts due to the migration of people from other areas for better living standards. Other than population, an increase in car ownership due to affordable car financing/leasing schemes, and a lack of a proper public transport system cause an increase in the number of vehicles on the road. The main objective of this study is to review the exiting urban transport system of Islamabad and Rawalpindi City, the impact of COVID-19 on urban mobility, and determine the Sustainable Urban Transport Index (SUTI) for both cities.

2. Study Area

Islamabad was made the capital city of Pakistan in 1960. The capital city Islamabad was planned as the low-density city by C. A. Doxiadis, a Greek architect (1). Islamabad has a geographical area of 906.5 sq. km out of which 25% is an urban area. As per the 2017 census (2), the population of Islamabad is 2 million and has a population density of 2211 persons per sq. km. It is considered the tenth most populous city of Pakistan. The Rawalpindi is located right next to the capital city Islamabad. Both cities are known as Twin Cities, as both cities are geographically contiguous and have strong social and economic linkage. Rawalpindi is the fourth largest city of Pakistan, located in Punjab Province. The population of Rawalpindi city is 2.09 million with a population density of 8,100 persons per sq. km. Rawalpindi is considered an administrative and commercial center. Figure 1 shows the study area and aerial view of twin cities.



Figure 1 Location of Islamabad and Rawalpindi

The Islamabad City structure is well defined and comprises homogeneous sectors. The city is split into 84 sectors and each sector is divided into five sub-sectors which include four residential and one commercial, known as “Markaz” sub-sectors (3). Each sector has a mix of low, middle income, and higher-income residential houses. The main commercial area is known as Blue Area, is considered as Central Business District (CBD) of Islamabad. As compared to Islamabad, Rawalpindi is not well planned and has a mix-use and high density of population. Figure 2 shows the jurisdiction boundaries of twin cities, major road networks, and areas of both Islamabad and Rawalpindi.

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