

Introduction

Transportation is an essential element in the economic development of a society. Without good transportation, a nation or region cannot achieve the maximum use of its natural resources or the maximum productivity of its people. Progress in transportation is not without its costs, both in human lives and environmental damage, and it is the responsibility of the transportation engineer working with the public to develop high-quality transportation consistent with available funds and social policy and to minimize damage.

Palestinian cities have an economical, industrial and residential development, which is observed in cities expansion and constructing and developing projects. Due to developing such projects, they will produce (generate) new vehicles on the roads. These developments could create impacts on the local roads and nearby roads, which are not planned to deal with this increase in number of vehicles produced by the users of these facilities. Therefore, there is a need to assess the traffic impacts of this development.

The city of Nablus is considered to be a major commercial, industrial and agriculture center in northern West Bank and it is a trading center and market place for the camps and village round it. In Nablus city there are several institutions that attract many people from different places such ministries, hospitals, universities and colleges. Due to this, Nablus is considered to be crowded and the traffic volumes that pass through it are very large. This affects mobility, accessibility, and safety for both vehicles and pedestrians. Figure (1) presents map of Palestine showing the central location of Nablus city.

The study area of this project is Hai Al- Montazah which is located on the western region of Nablus CBD (550 m to the west of the CBD). The study area is surrounded by Al-Ameer Mohammad Street from the west, Sufian Street from the east, Shwaitreh Street from the south and Haifa Street from the north (see Figures (2) and (3)). Based on aerial photographs, Hai Al- Montazah has a total floor space of approximately 200 donums which calculated from google earth.

Because of lack spaces of parking bays and garages (compared to demand), parking is considered another main problem in the study area. Because of that, new buildings (constructed or approved for construction but not yet built) will contribute to the parking problem in the area. Parking in Nablus overall and in Hai Al- Montazah in particular is depending mainly on curbs. Because the spaces of parking are not enough, drivers park their vehicles at the crosswalk, narrow roads, curves and intersections, which causes additional traffic problems.

The movement of pedestrians in Hai Al-Montazah in Nablus experiences

many problems since limited areas of pedestrian facilities are available.

Thousands of people needs to continue their life daily in Hai Al-Montazah,

so the need to go through important pedestrians flow axis, in front of Bank of Palestine (Sufian and Hamdi Kanaan intersection) and (Palestine and Sufian Intersection) which are the most representative places for pedestrians problems in the study area. Transportation system management (TSM) strategies are needed to protect Hai Al-

Montazah pedestrians and to get a good level of service for them; thus, safety will be satisfied. This requires studying the area of Hai Al-Montazah to analyze, discuss, and solve the problems by using proper traffic control devices (TCD), sidewalks and crosswalks for pedestrians, etc.

Objectives

Hai Al-Montazah has several vital development projects consisting of several land uses; buildings constructed and projects are under construction, in addition to public transport complexes in the area, which would generate significant trips onto the roadways within the study area. Therefore, the aim of this study is to analyze traffic impacts of these developments on the system of roads in and around the study area. In addition, proper alternative solutions will be presented and analyzed.

The main objectives of study is to investigate whether the road network and intersections are able to accommodate the future traffic volume, and to make the necessary actions such as the redesigning the roads with regard to geometric, traffic and geotechnical considerations. The project will be conducted in cooperation with Nablus Municipality.

