

PalArch's Journal of Archaeology
of Egypt / Egyptology

SPATIAL ANALYSIS OF TRAFFIC ACCIDENTS IN THE IRAQI MIDDLE
EUPHRATES PROVINCES: A CASE STUDY

Lec. Ruqayya Fadhil Abdullah Al-Hassan¹ Assist. Prof. Dr. Ameera Mohammed Ali Hamza Al-Asaadi²

*^{1,2} Faculty of Education for Humanities, Department of Geography, University of Babylon-
Iraq*

Corresponding Author's E-mail: ruqaih@yahoo.com

Lec. Ruqayya Fadhil Abdullah Al-Hassan ,Assist. Prof. Dr. Ameera Mohammed Ali Hamza Al-Asaadi.Spatial Analysis Of Traffic Accidents In The Iraqi Middle Euphrates Provinces : A Case Study--Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 4482-4498. ISSN 1567-214x

Keywords: Traffic, (Jassim, 2014: P.13) Traffic Accident,(Dhahad, 2015: P.642) Traffic Safety (Al-Sarraf, 2013 : P.236)

ABSTRACT

Traffic accidents are among the most important problems that leave economic and social impacts as a burden on the citizen. In addition, they leave economic costs in terms of material or human losses. Some traffic accidents lead to a permanent disability or temporary disability that needs a period of time, which of course, requires financial costs for the purpose of medical treatment. The problem of traffic accidents is witnessing an increase at the present time. This is primarily attributed to the increase in the number of residents and vehicles of various kinds. They leave negative effects, which became a human tragedy. Therefore, this problem can be attributed to a set of factors causing the increase in traffic accidents of various types, such as those accidents related to the driver, including lack of compliance with the law, regulations, traffic signals, lack of maintenance for the transportation network in general, as well as failure to adhere to the legal age related to the driver's age and recklessness... etc. The present study aims to study traffic accidents in Iraq in general and in the Middle Euphrates region in particular, as it is a central focus in Iraq, in addition to identifying the causes that led to the development of the problem in the study area and thus taking measures that would reduce or limit the problem. Traffic accidents have recently increased in Iraq at high rates for the period (2001-2018). The total number of traffic accidents reached about (539,496) accidents, according to the statistics of the Ministry of Planning, the Central Agency, the Transportation and Communications Department. This number is considered high in comparison with the population of Iraq.

Keywords: Traffic, (Jassim, 2014: p.13) Traffic accident,(Dhahad, 2015: p.642) Traffic safety (Al-Sarraf, 2013 : p.236)

INTRODUCTION

Iraq, in general, and the Middle Euphrates region, in particular, suffer from the high ratio of traffic accidents due to the growing population and the increase in the number of vehicles without being accompanied by any development in the service sector of the transport and communications network. Therefore, the number of accidents on the transport roads, including highways, main, secondary, and even rural is increasing day after day. This has become a social and economic problem that affects the whole society alike. Despite the measures taken by the concerned authorities to reduce or limit traffic accidents throughout Iraq, they are witnessing an increasingly large increase than they were in 2001. The spatial limit of the present study is Iraq, with special reference to the Middle Euphrates region, which is astronomically located between two latitude circles ($33^{\circ} 3'$ - 29° north) and two longitudes (43° - 45° east), whose area reaches (98870) km² of the total area of Iraq. From the north, it is bounded by Baghdad, from the east and south-east, it is bounded by Wassit, Nasiriyah, and Basra, from the south, it is bounded by an area that represents the political borders of the Kingdom of Saudi Arabia, and from the west, it is bounded by Anbar as shown in Maps (1) and (2).

Problem of the Study

The study problem can be summarized in the following questions:

Has the number of traffic accidents doubled in the Middle Euphrates region compared to the other Iraqi provinces? What are the factors and causes of traffic accidents? What are the effects of traffic accidents? Are traffic accidents variant in the provinces of the Middle Euphrates?

Objectives of Study

The present study aims at:

Identifying the number of traffic accidents and their causes in the study area.

Determining the extent of the negative effects resulting from traffic accidents.

Identifying the geographical distribution of traffic accidents and the measures that can be taken to achieve traffic safety.

Design of the Study

The present study is divided into four sections represented by the following:

Section one discusses types and development of traffic accidents in Iraq for the period (1980-2018). Section two tackles the factors causing traffic accidents, their types, and their effects in Iraq for the year 2018. Section three presents the social and economic effects of traffic accidents in Iraq and the resulting injuries and deaths for the year 2018.

Classification of accidents and the evolution of traffic accidents in the Iraqi Middle Euphrates region for the period (1980-2018).

Classification of traffic accidents

According to the damage they cause, traffic accidents are classified into four groups:

Fatal accidents that lead to the loss of a person's life.

Accidents of severe injuries that lead to disability of individuals for a period of time or cause them a permanent disability that remains with them for life. Minor accidents that disappear after a period of time. Accidents that do not cause any deaths or injuries, whose damage is primarily material, such as the damage of vehicles (Al-Ajwad, 1995 :p.85).

Forms of traffic accidents

Traffic accidents take different aspects as follows:

Collisions between cars or between fixed or moving solid objects.

Accidents involving pedestrians on roads or sidewalks inside cities.

Car accidents.

Cars combustion accidents (ibid).

Elements of traffic accidents

The driver of the vehicle; It is the person who drives the vehicle or an animal that drives, loads, or rides, directly. Neglecting these factors and not being aware of them leads to the occurrence of accidents (Al-Jubouri, 2015 : p.391)

Vehicle; It is all that is allocated to traffic on the highway. It often results in losses. The highway; It is the passage through which the means of transport pass (Al-Jubouri, 2015:p.31).

The number of traffic accidents in the Iraqi Middle Euphrates provinces has increased for the period (1980-2018).

Krug Wanger believes that about 90% of disabilities resulting from traffic accidents occur in developing countries. The United Nations report for the year 2010 indicates that more than half of the victims of traffic accidents are of the working age group. This prompted the United Nations to issue the first global report on prevention Of traffic accidents. Great importance was given to this matter when the United Nations General Assembly issued the Resolutions 58/289 in 2004, 5/60 in 2005, and 62/244 in 2008. All resolutions aim to take measures to improve road safety at the global level (Al-Rayani et al ,2014:p.8).

Statistics issued by the Ministry of Planning, the Central Agency for Development Cooperation, Transport and Communications Department for the period (1980-2018) indicate that traffic accidents amounted to about (395231) accidents as shown in Table (1) and Figure (1). From the aforementioned, it is concluded that the number of traffic accidents for the period (1980-1989) amounted to (293981) accidents. From (1990-1999), the number decreased to (94455) accidents from the total traffic accidents in Iraq. Accidents amounted to (539,496), in the period (1980-2018) due to the application of laws and regulations related to safety and security as well as the decrease in the number of cars due to the economic conditions in Iraq.

Table (1) evolution of traffic accidents in Iraq for the period (1980-2018).

The year	Number of accidents
----------	---------------------

- Jassim, A. (2014)." The Impact of Daily Work Directions on Traffic Jams in the City of Najaf", Unpublished Master Thesis, Faculty of Arts, University of Kufa, p.13.
- Zouka, M. (2000)." Geography of Transport", University Knowledge House, Cairo, p. 31.