CYCLING AS ALTERNATIVE MEANS OF TRANSPORT: A FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT FOR THE CITY OF HIDALGO DEL PARRAL, CHIHUAHUA

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Abstract: Car was designed to facilitate people's transportation. However, excessive use of this technology has brought with it many problems, such as: air pollution and pollution of the general natural resources, high dependence of the automobile, high levels of traffic, high economic costs and health problems, and others. This situation is exacerbated not only in highly urbanized cities also in small cities, as is the case in Hidalgo del Parral, Chihuahua, Mexico. This community, according to official statistics, has 107,042 inhabitants and 40,576 vehicles, which implies a high proportion according to national standards. The problem is compounded when the steady increase in car leads to other effects such as traffic accidents, and others. Therefore, the objective is to propose an alternative to the automobile by promoting cycling as a transport medium, and measure the impact on the environment and the quality of life of people, captured in their health. The methodology to following is a origin-destination survey which shows the results of the feasibility of using bicycles as a means of transport and mobility between people. Based on the results, arise two public policies for immediate implementation: bicycle rental and the creation of bikeways, together with payment of parking, limited parking in the street, circulation plans to eliminate vehicular traffic in the center of the city, areas 30 and avenues for walking, the acceptance of these policies are evidenced by a Poisson regression model.

Keywords: Bicycle, bikeways, feasibility, quality of life and the environment.