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## TREND IN EXHAUST EMISSIONS FROM IN-USE GASOLINE VEHICLES

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### **Abstract**

The main goal of this study is to determine the trend in exhaust concentrations during the last 12 years. Accordingly, a non-disperse infrared gas analyzer was used to measure the concentrations of carbon monoxide (CO) and hydrocarbons (HC) emitted from vehicle exhaust. A total of 449 vehicles distributed across model years ranging between 1968 and 2005 were tested under idling conditions. The results indicated that there is a strong relationship between the age of the vehicle and the concentration of exhaust emissions. Moreover, there has been a significant reduction in exhaust emissions over the last 12 years with decrease in the average concentrations of CO and HC of 25% and 28%, respectively. Therefore, it is recommended removing the customs fees for the new vehicles and maintenance spare parts, which will encourage the purchase of new vehicles and participation in maintenance programs, with further decreases in exhaust emissions.

*Key words:* air pollution, carbon monoxide, exhaust emissions, hydrocarbons, Jordan, vehicles emission,

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