## **ABSTRACT**

This study evaluates the performance of part of the public transport in Baghdad City through studying the performance of three selected bus routes. Data was collected manually using survey forms designed for the study purpose. The collected data covered bus usage and bus travel times. Moreover, the process of planning an HOV (High Occupancy Vehicle) lane on a selected arterial with in Baghdad City is also investigated. For this purpose data was collected regarding traffic volumes, saturation flows and vehicle occupancy rates. HCS-94 program is adopted in this study to investigate the level of service for intersections and apply coordination on arterial.

Results of this study revealed that the number of buses supplied for each of the selected routes was enough to cover the demand. Moreover, average bus travel speeds ranged from 10.8 and 14.31 kph, while average bus running speeds ranged between 18.32 and 23.15 kph. Also, bus stops were the main cause of delay to buses, furthermore, bus lane can not be implemented along some arterials while HOV lane can perform well.