



Global Advanced Research Journal of Engineering, Technology and Innovation (ISSN: 2315-5124) Vol. 3(8) pp. xxx-xxx, December, 2014  
Available online <http://garj.org/garjeti/index.htm>  
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*Full Length Research Paper*

# Delay and Cost Overrun in Road Construction Projects in Jordan

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Accepted 02 December 2014

**This study aims to identify the most important factors that cause delay in road construction projects in Jordan, which results in cost and time overrun allocated to this type of engineering projects and cause critical problems for both the developer and the contractor. The gap between the cost at completion and that originally estimated, known as cost overrun, can be regarded as one of the most important parameters reflecting the success of projects. In the public sector, money spent on project change orders results in increased construction time which in return reduces the number and size of the projects that can be completed during any given fiscal year. To achieve this goal, the documents and the final reports for several sample projects implemented over the years 2000 to 2008 were analyzed. All of the projects were administered by the same organization taken from Jordan Ministry of Rural and Public Works. The results of this study can assist highway officials in their design, planning, scheduling and projects completions so that necessary actions can be taken to control these overruns in future projects. The study showed that 19 factors might cause delays of road construction projects as defined through a detailed literature review. The analysis of the study indicated that the top causes affecting time and cost overrun in road construction projects in Jordan are Terrain and Weather conditions.**

**Keywords:** project management, road construction, cost overrun, civil engineering.

## INTRODUCTION

A cost overrun is defined as a cost increase or budget overrun, involves unexpected cost incurred in excess of budget amount due to an underestimation of the actual cost budgeting of the road construction projects of the most important projects in Jordan . These projects needed to connect cities and to serve the movement of people and goods.

Most road construction projects in Jordan are characterized by overrun in cost and time. Problem of cost overrun is critical and needs to be studied to alleviate

this problem in the future and to make recommendations to overcome the critical factors in future road projects.

Generally, cost overruns have several reasons (Gary Hinson, 2009): errors in budgeting, costs required beyond the scope of work, tools and equipment costs exceed project allocation.

For this reason, we conduct the analyses and examination of the reports taken from the Jordanian Ministry of Rural and Public Works for several road projects in Jordan over the years 2000-2008. The causes

