A Concept Paper On Traffic Jam Data Collection

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1 INTRODUCTION

1.1 Background

In many countries, there is an increased rate of traffic jam due to increase number of vehicles. For example in Uganda according to Uganda Revenue Authority(URA), there is an estimate increase of vehicles by over 635,656 from 50,102 in the last 20 years. 80 percent of these vehicles operate in urban areas there by leading to traffic jam. In this paper we are going to discuss the methods we are going to use to capture data about traffic on different roads.

1.2 Poblem Statement

Currently most drivers have no information about traffic on different roads at a given time. therefore they end up using roads which are so much congested and tend to spend much time on their travel.

Collection of this data will help people to know how they can avoid traffic by looking at the roads in the sample which are highly affected by traffic.

2 LITREATURE REVIEW

internationally, Reasearch about traffic jam has been conducted since all countries use transport means. Such kinds of reasearch are done in order to provide efficiency in transport means. The following are some of resarches conducted about traffic:

Analysis of the traffic problems and research on the traffic strategy in group urban development. It was considering Foshan City an intermediate station located in the west of the Pearl River Delta and its surroundings. The target of this development strategy was to provide an efficient, safe, comfortable and clean transportation service. It embodies the principle of people first in sustainable urban transportation development. Consequently, it effectively solves a variety of current traffic problems in group urban development, and it provides validity with extensive applications.

Traffic Data Collection and Analysis in Botswana. Traffic Data Collection and analysis was done through establishment of regular manual traffic counting programmes and spontaneous automatic counters along the public highway network. schemes.

3 OBJECTIVES

3.1 Main Objective

To ensure effective transportation by providing information on different roads about traffic such that one can estimate when to use such roads and avoid traffic.

3.2 Specific Objectives

Assessment of pavement performance through traffic surveys and Period monitoring of selected sections.

information is required in respect of traffic characteristics for proper maintenance, planning, design, maintenance and management of the national road network.

Ascertaining appropriate/optimal timings for maintenance interventions and rehabilitation needs of various roads countrywide.

ensure that existing roads are adequately maintained in order to provide appropriate level of service for road users.

Establish the use of the road network by vehicles of different categories, traffic distribution, etc.

4 Research Scope

4.1 Geographical Scope

This research is global therefore its going to cover both rural and urban areas in different countries.

4.2 Theoraticle Scope

This system will be used by the system administrators and other people who will be responding to the forms providing information about the specific area and also the time in which the roads are affected by traffic.

5 Methodology

In the Traffic jam Data Collection and analysis we are going to use forms which will request users to provide information on the traffic status in different country, region, district and a particular road with a picture of it including the time and date of when the information is given and may also upload a video.

In summary the form will include the following fields:

TRAFFIC JAM DATA COLLECTION FORM
Country
Region
District
Road

Date and Time

GPS Codes

Image

Table 1: Traffic Jam table

COUNTRY	REGION	DISTRICT	ROAD	IMAGE	DATE AND TIME	GPS Codes
Uganda	Central	Kampala	Kampala Road		17/05/2017 9:45am	
Uganda	Central	Kampala	Makerere Hill Road		21/05/2017 10:35am	

Above is an example of the data that will be given in the ttraffic jam form