LITERATURE SURVEY

**Traffic and capacity analysis in major ports**

[1] Paper Name: Smart Transportation

­ Author name : William HK LAM, Hong K Lo

Smart city the use of technologies to provide intelligent response to the needs of the city. Smart Transportation is About Urban Planning Smart City Planning Integrated development & spatial planning Transportation & traffic strategy Environment & public safety. Technologies & Urban Infrastructure Automation Real-time information Advanced control methods. Smart Sensing and Computing Stationary & mobile data Urban informatics & data analytics. Technologies & Urban Infrastructure Automation Real-time information Advanced control methods.

[2] Paper name: Traffic management

Author name: Underwood R,T

Traffic management is the organisation, arrangement, guidance and control of both stationary and moving traffic, including pedestrians, bicyclists and all types of vehicles. Its aim is to provide for the safe, orderly and efficient movement of persons and goods, and to protect and, where possible, enhance the quality of the local environment on and adjacent to traffic facilities. This book is an introduction to traffic management, written in laypersons' language, and assuming no background knowledge of the subject. Various basic traffic characteristics relating to road users, vehicles and roads, and traffic regulation and control, are discussed, including some traffic volume and traffic flow considerations relevant to traffic management. For effective traffic management, it is essential that the practitioner works from factual information.

[3] Paper name :Traffic congestion

Author name: Er .C. J. Johnson

Cost of US cities ranges between USD 35 billion to USD 48 billion. US loses roughly 2% of GNP in traffic congestion.UK Loses 5% of GNP .Traffic jams cost Moscow USD 1.3 billion a year .Traffic congestion costs the South African business USD 18 billion a year .Traffic congestion in Dhaka eats up USD 3 billion a year .

Losses due to increased carbon dioxide emission .More atmospheric pollution .More diseases due to increased pollution .increased mental tension for passengers .increased cost of travel .increased cost of transporting products .increased cost of doing business.

Time loss due to congestion in more than 1000 million passengers travel by road every day ,worldwird .if a passenger lose 1 minute everyday ,in traffic congestion ,total annual time loss is 700,000 Years

Reference

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Charlton, SG, Mackie, HW, Baas, PH, Menenzes, M & Dixon, C, 2010 Using endemic features to create self-explaining roads and reduce vehicle speeds, *Accident and Analysis and Prevention*, 42, pp1989-1998.

Carlsson, A, 2009 *Evaluation of 2+1 roads with cable barriers* rapport 636, VTI; Linkoping, Sweden.