

LITERATURE SURVEY

Domain : *Data Analytics*

Project Title : *Traffic and Capacity Analytics for Major Ports*

Team ID : *PNT2022TMID16862*

Team Members : *1. Varsha A*
2. Siva Saraswathi M
3. Soundarya Lakshmi A
4. Vishali R K

[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: Forecasting Vehicular Traffic Flow

Author name : Okutani, Iwao, and Yorgos J. Stephanedes.

This article presents the theoretical basis for modeling univariate traffic condition data streams as seasonal autoregressive integrated moving average processes. This foundation rests on the Wold decomposition theorem and on the assertion that a one-week lagged first seasonal difference applied to discrete interval traffic condition data will yield a weakly stationary transformation. Moreover, empirical results using actual intelligent transportation system data are presented and found to be consistent with the theoretical hypothesis. Conclusions are given on the implications of these assertions and findings relative to ongoing intelligent transportation systems research, deployment, and operations

[3] 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.

[4] 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.

[5] Critical infrastructures

Author name: Smith, Brian Lee, Billy M. Williams, and R. Keith Oswald

Failures in critical infrastructures may be hazardous to population, economy, and national security. There can be strong interdependencies between various infrastructures, but these interdependencies are seldom accounted for in current risk and vulnerability analyses. To reduce probability and mitigate consequences of infrastructure failures, these interdependencies have to be assessed. The objective of this paper is to present a method for assessing interdependencies of critical infrastructures, as part of a cross-sector risk and vulnerability analysis. The method is based on a relatively simple approach applicable for practitioners, but may be extended for more detailed analyses by specialists. Examples from a case study with the Emergency Preparedness Group of the city of Oslo, Norway, are included. 5.)Spatial characteristics of transportation hubs centralit

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.*

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