# SATC 2010 Infrastructure session summary

RPF May 2010



#### **SATC 2010**

- Dates
  - 16 to 19 August 2010
- Topic
  - Walk Together
- Website
  - www.satc.org.za



#### Sessions

- Walk Together: Policy Imperatives
- Infrastructure (3 days)
- Passenger Transport
- Rail Transport, Freight and Logistics
- Traffic Engineering
- Traffic Management, Safety and Security
- Transport Planning (2 days)
- Transport for Rural Development
- Workshops
  - BRT/IRPTN Implementation lessons learnt
  - Optimisation of transport and mixed land use (Gautrain experience)
  - 2010 Highway Capacity Manual (SAICE in cooperation with SATC/TRB)



#### SATC 2010 Infrastructure session

- 3 full days
- 18 papers
  - 6 Asphalt
  - 2 Concrete / Cement
  - 8 Roads and Pavements
  - 2 Bridges
- Panel discussion on skills development
- HVSIA workshop



## Asphalt papers

- Effect of filler on cohesion and fatigue resistance of hot-mix asphalt
- Hot-mix asphalt testing for the South African pavement design method
- Rheological characterisation of South African road bitumens
- Evaluation of bitumen-rubber asphalt
- Fatigue failures of asphalt pavements



## Concrete / Cement papers

- Ultra thin reinforced concrete pavements (UTRCP)
- Reuse of cementitious materials in roads



## Pavement / Roads papers

- Evaluation of 3d laser device for characterizing shape and surface properties of aggregates used in pavements
- The dielectric constant as a means of assessing the properties of road construction materials
- Identification of microscale characteristics of treated subgrade materials and how they relate to macroscopic properties
- Comparative study of engineering properties of soil treated with emulsion (STE) determined with various field evaluation apparatus
- A laboratory study to investigate the development of stiffness in stabilized materials
- Utilising innovative materials design for cost-effective and long life pavements: case study at OR Tambo international airport
- Perpetual pavement response under heavy vehicle loading
- The Namibian road sector reform an evaluation



### Bridge papers

- Study on seismic behaviour of long-span lightweight concrete continuous rigid frame bridge
- Typical damage analysis of highway bridges near the Yingxiu-Beichuan fault in Wenchuan earthquake



### **HVSIA** workshop

- Feedback from all HVS International Alliance partners on highlights over last 10 years
  - SA, California, Florida, Finland/Sweden, US Corp of Engineers, India, China
- Discussion on APT-related research

