

The 39th annual

SOUTHERN AFRICAN TRANSPORT CONFERENCE and EXHIBITION (Virtual Event)

THEME

SUSTAINABLE TRANSPORTATION THROUGH ENABLING PARTNERSHIPS

PATRON

THE MINISTER OF TRANSPORT

The conference is endorsed by the International Road Federation

5 to 7 July 2021

“Early Bird” registration from 3 May - 10 June 2021
(The full registration fee applies after 10 June)

FINAL ANNOUNCEMENT AND PROVISIONAL PROGRAMME

CONTACT DETAILS

CONFERENCE SECRETARIAT (Correspondence and Enquiries)

Ms Jacqui Oosthuizen
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Webpage: www.satc.org.za
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ORGANISING COMMITTEE SATC

Bean, Ms Wilna	University of Pretoria
Behrens, A/Prof Roger	University of Cape Town
De Beer, Mr Gerhard	Gibb
Dimitrov, Ms Laverne	Development Bank SA
Gräbe, Prof Hannes	University of Pretoria
Jennings, Ms Gail	Research Consultant
Maina, Prof James (Chairman)	University of Pretoria
Manana, Ms Khibi	Department of Transport
Mashiri, Mr Mac	Gwarajena TRD
Mhlanga-Mochadibane, Ms Mavis	Tshwane Women in Transport
Mojafi, Mr Tebogo	SAMSA
Mokonyama, Dr Mathetha	CSIR Built Environment
Naidoo, Dr Kavendra	CSIR Aeronautics Systems
Nordengen, Dr Paul	HV Tech
Oosthuizen, Ms Jacqui	Secretariat
Pretorius, Dr Pieter	Innovative Transport Solutions
Ribbens, Dr Hubrecht	Consultant
Steyn, Prof Wynand	University of Pretoria
Verhaeghe, Mr Benoit	CSIR Built Environment
Visser, Prof Alex	University of Pretoria
Wang, Mr Yuchen	SACTCC

TECHNICAL COMMITTEE

Mohan, Prof Dinesh
 Ölcer, Prof Dr Aykut
 Prozzi, Prof Jorge
 Wegman, Prof Fred

Indian Institute of Technology, Delhi
 World Maritime University, Sweden
 The University of Texas, USA
 Delft University of Technology, The Netherlands

INVITATION

Everyone in any way connected with transport is invited to register for the 39th (Virtual) Southern African Transport Conference (SATC 2021). It will be of particular interest to: municipal and provincial employees, policy and decision-makers, academics, researchers, students and professionals active in the planning, construction, manufacturing, logistics, operation and safety of passenger and freight transport, road traffic, rail, ports, maritime and aviation. End-users will also find the conference of interest.

SYNOPTIC PROGRAMME

From Monday to Wednesday the sessions/workshops (1A-1E, 2A-2E, 3A-3F) take place until 13h00 daily, and it is therefore possible to **register for only one session** per day. However, once at the virtual event, delegates are welcome to **move between sessions**.

DATE	SESSION NO	EVENT
Monday, 5 July		Opening Session
	1A	Infrastructure
	1B	Urban and Public Transport
	1C	Aviation
	1D	Maritime
	1E	Treasury Workshop - Public Transport and Spatial Transformation
Tuesday, 6 July	2A	Infrastructure
	2B	Urban and Public Transport
	2C	Rural Development/ Capacity Building
	2D	Freight and Logistics
	2E	Traffic Management, Safety and Security
Wednesday, 7 July	3A	8th China-Africa Transport Co-operation Forum
	3B	PPP Workshop
	3C	Integrated Public Transport Networks
	3D	Climate Change Workshop
	3E	Road Safety Engineering Workshop and Traffic Engineering
	3F	Impact of Covid-19 on Women and Small Business

AWARD CEREMONY

The following awards for papers presented at the conference will be announced on Monday 5 July (12h30 – 13h00):

- SATC Award for the “**Best Paper**”;
- SATC Award for the “**Best Practical Paper**”
- SAICE Transportation Division Award for the “**Best Paper by a Young Professional**”
- The ‘**Distinguished SATC Fellow**’ award

Delegates registered for any of the three days of the conference are invited to attend our virtual Award Ceremony on 5 July (Day 1) from 12:30 till 13:00. We request that you indicate your attendance during the registration process by selecting the appropriate option – this attendance comes at no additional cost to delegates registered for any of the 3 conference days.

EXHIBITION

An exhibition – a showcase for all related industries – will run concurrently with the conference from Monday to Wednesday. Organisations wishing to exhibit are requested to contact the Conference Secretariat. Registered delegates are encouraged to visit the exhibition booths at any time during the day and engage with our valued sponsors and exhibitors. There will be options to browse the virtual stands, schedule virtual meetings with exhibitors, have ad-hoc meetings and much more.

PROMOTIONAL OPPORTUNITIES

Organizations interested in Promotional Opportunities should contact the Conference Secretariat.

CONFERENCE DOCUMENTATION

Delegates registered for any of the conference sessions and workshops will receive the following documentation:

- Conference Handbook containing the programme and abstracts of the papers presented at SATC 2021;
- A link to access the full papers presented at SATC 2021

NETWORKING LOUNGE

Delegates registered for any of the conference sessions are encouraged to visit our virtual networking lounges throughout the event duration. This is a great place to catch up with your industry counter parts, make new connections and have open and free discussions regarding your industry.

STUDENT ESSAY COMPETITION

The Organising Committee has instituted an essay competition open to all registered students (undergraduate as well as postgraduate) at tertiary institutions. The competition is held within the institutions (the Organising Committee has already been in contact with the institutions) and each institution will select its two winners.

Students need to prepare a five-page essay on “Sustainable Transportation Through Enabling Partnerships”. This relates to the theme of SATC this year. Final selections will be done by each institution, and the winning essays submitted to the SATC Secretariat (satc.conference@gmail.com) by 10 May 2021.

The two top authors from each institution and their lecturer will be supported to attend SATC 2021.

REGISTRATION AND PAYMENT

REGISTRATION – OPENING 3 MAY 2021

Registration is per day. This three-day virtual conference consists of an opening session, plenary and parallel sessions, including Workshops.

The **conference sessions** (1A-1E, 2A-2E and 3A-3F) take place from 08h30 to 13h00 and it is therefore possible to **register for only one session per day**. Delegates are welcome to move between the sessions.

Registrations are done via the SATC website: www.satc.org.za

FEES AND PAYMENT

Registration fees are payable in advance by:

▪ EFT

Direct deposits may be made into the following bank account and proof of payment sent to the SATC Secretariat (email: satc.conference@gmail.com). Please use the pro forma invoice number as reference so that the payment can be identified and the correct delegate(s) credited:

Bank	FNB
Branch and code	Hatfield 242-145
Account name	Annual Transportation Convention
Account No	54501151268
Swift code	FIRZAJJ (for transfers from foreign countries)

▪ PAYFAST

Upon completion of your registration, you will have the option to be directed to the secure Payfast (payment gateway) site to make a card payment for immediate settlement of delegate registration fees. This platform accepts all major currencies, and all billing conversions are done in original Rand (R) value.

The late registration fee will apply for all payments received after 10 June 2021.

ID NUMBER IS REQUIRED FOR REGISTRATION FOR ALL SOUTH AFRICAN RESIDENTS

If you register as a STUDENT, you are required to provide your student number.

PRESENTERS will attend at no cost on the day of their presentation. Presenters will be registered by the Conference Secretariat for the day of presentation. For attendance on other days, please register via the website.

Fees are per day Fees include 15% VAT (please supply your company VAT number on registration form)	Early bird fee: (For registrations AND PAYMENT up to 10 Jun)	Late fee (For registrations AND PAYMENT from 11 Jun)
Student	R 500	R 700
Young Professional (under35)	R 800	R1 000
Delegate	R1 000	R1 200

CONFIRMATION

Once your registration is complete and payment received you will receive an email confirming your registration. Therefore, please ensure that your correct e-mail address (and other contact details) is given on the registration form. You will receive an email with relevant log in details closer to the event date.

CANCELLATION

Notification of cancellation received, in writing, prior to or on Friday, 2 July 2021 will be subject to a 25% handling fee and processed after the conference. Delegates may be substituted at any stage. No refunds will be made on cancellations received after 2 July 2021.

DELEGATES ARE REMINDED THAT A COMPLETED REGISTRATION FORM IS TAKEN AS A FIRM COMMITMENT AND IN THE EVENT OF NON-ATTENDANCE, THE DELEGATE WILL BE HELD RESPONSIBLE FOR PAYMENT OF THE FULL ACCOUNT.

Please send proof of payment, using the pro forma invoice number as reference.

(A Tax invoice is issued after payment reflects on our bank statement)

CPD ACCREDITATION

The conference is SAICE accredited and professional engineers will earn one credit per day of attendance. Only registered delegates who attended the full day will earn one credit per day.

OPENING ADDRESS

Hon. Fikile April Mbalula
MINISTER OF TRANSPORT



MONDAY

Mr Zolani Matthews
PRASA



Zolani Kgosietsile Matthews, is the Group CEO of the Passenger Rail Agency of South Africa (PRASA) and he is responsible to lead, direct and manage the turnaround strategy of the organisation which is to provide safe, reliable, affordable and clean passenger rail and bus service.

Mr. Matthews is a seasoned professional, with a robust understanding of International and Domestic Business Strategy and an ability to operate in complex, dynamic and agile organisations. His professional track record bears witness to his focus on corporate governance, transparency, and value-based organisations.

Mr. Matthews is an accomplished Harvard University Masters graduate with over 30 years of experience, he holds directorships on several listed companies where he devotes his exceptional strategic skills and his ability to provide oversight in large and small business organisations.

TUESDAY

Mr Nico McLachlan

ORGANISATION DEVELOPMENT AFRICA (ODA)



Nico McLachlan is the Managing Director of Organisation Development Africa (ODA). The company specialises in the application of strategy and change management process in the urban mobility sector. Nico holds graduate and post graduate qualifications in political science, public management and organisational studies. He is the former independent chair and CEO of the Cape Town unicity commission and former chair of the CODATU scientific committee. Nico is a member of the advisory board of the University of Cape Town (UCT), Centre of Transport Studies.

In his career, spanning more than 30 years, he has acted as Taxi Industry Transition Advisor on the Cape Town MyCiTi Phase 1 BRT project, the N2 Express BRT project and the Rea Vaya Phase 1B BRT project in Johannesburg.

In 2017-18, he was appointed Country Manager for Kenya and Rwanda on the World Bank SSATP urban mobility program. Over the period 2017-19, Nico acted as Project Manager on the City of Cape Town Minibus Taxi Transport Operating Company (TOC) pilot project. The aim of this project was to improve the minibus taxi business model and to lay the foundation for the professionalisation of the minibus taxi industry.

Over the period 2019/20 he also undertook the development of the second-generation public transport contract model for the city of Kigali. Nico currently acts as Senior Technical Advisor preparing the paratransit sector in the city of Kampala for participation in the planned scheduled bus and BRT systems.

Nico is a contributing author to the publication *Paratransit in African Cities*, edited by Roger Behrens, Dorothy McCormick and David Mfinanga and acts as guest lecturer on the UCT Centre of Transport Studies Master programme specialising in the topics of paratransit, operations and regulatory reform

Prof Fred Wegman

DELFT UNIVERSITY OF TECHNOLOGY, NETHERLANDS



Prof. Fred Wegman, Delft University of Technology, the Netherlands. After his education as a civil engineer at TU Delft, Fred joined the City of Amsterdam as a transportation engineer. After that he started his career at the SWOV Institute for Road Safety Research. Initially as a researcher, research manager, research director and the last fourteen years as a managing director. He combined that position with a full professor and chair Traffic Safety at Delft University. He is emeritus professor since 2014. Fred is one of the founders of the Safe System approach in road safety. Fred served in many activities

of international organization and he is still acting as chairman of the International Traffic Safety Data and Analysis Group. He worked in road safety and carried out training programmes in 25 countries worldwide. He was a Thinker in Residence in South Australia. Fred is one of the founders of Delft Road Safety Courses. He was awarded a Royal Order by the King of the Netherlands: Officer of the Order of Orange-Nassau.

WEDNESDAY

Ms Susanna Zammataro

INTERNATIONAL ROAD FEDERATION (IRF) – DIRECTOR GENERAL, SWITZERLAND



In her capacity as Director General of the International Road Federation (IRF) in Geneva, Switzerland, **Susanna Zammataro** is responsible for developing and implementing strategic plans for the organization. *Established in 1948, IRF is a membership-based organisation, representing leading corporate and institutional players drawn from the road and mobility sectors worldwide. Its mission is to promote the development of roads and road networks that enable access and sustainable mobility for all* (www.irfnet.ch).

Recently named as one of the 40 Most Remarkable Women in Transport by TUMI, she is the in-house expert on sustainability and responsible for the eponym programs and activities run by the IRF. These include the Greenhouse Gas Calculator for road infrastructure (CHANGER) and the Green Public Procurement Initiative and Innovative Practices for Greener Roads. Member of the UNECE Climate Change Expert Group on Adaptation she is also part of the UNCTAD group of experts on transport climate resilience and adaptation.

Susanna is an untiring advocate for road safety. She is a member of the Advisory Board of the FIA High Level Panel on Road Safety and serving since 2012 as the Co-Chairperson of the “Safer Roads and Mobility” Pillar of the United Nations Road Safety Collaboration Group (UNRSC), a global multi-stakeholder partnership whose aim is to facilitate international cooperation and to strengthen global and regional coordination.

Susanna has been involved since its inception in the Sustainable Mobility for All (SuM4All) an initiative led by the World Bank and bringing together 55 top stakeholders from the transport sector. She serves currently as a Steering Committee Member and is one of the experts supporting SuM4All workstreams on data sharing, on gender and on LMICs in-country pilots.

She has represented the Federation at high-level meetings all over the world. She is regularly invited to speak on a variety of topics at international fora and conferences.

Ms Heidi Bartis

SOUTH AFRICAN BREWERIES – BU SA DIRECTOR COMMUNITIES



Heidi Bartis's career as a Leader spans across five industries working in food and beverages (alcohol), private and public health care and private and public education industries, with 12 years' experience in the alcohol industry. She is skilled in Corporate Communications Strategy, Issues and Reputation Management, Stakeholder Relations and Societal Impact.

Heidi obtained a Masters Degree in Strategic Communication, Executive Education includes the Africa Directors Programme from the University of Stellenbosch Business School, and a Post Graduate Diploma in Management Practices from Henley International Business School. She has occupied senior management roles at Mediclinic Southern Africa, the Distell Group and the Western Cape Health Department.

Currently, she occupies the role as BU SA Director: Communities at the South African Breweries, a proud family member of ABInBev. The focus of the Communities portfolio is on the reduction of harmful alcohol consumption aligned with the company's Smart Drinking Beliefs and Global Smart Drinking Goals to ensure community transformation. Specific focus includes road safety aimed at curbing drinking and driving as well as UNITAR road safety training opportunities for key government road safety stakeholders in South Africa.

SESSIONS

MONDAY, 5 JULY

07:30 - 08:30	DELEGATES LOG IN – Take some time to become familiar with the platform and offerings. Feel free to visit the <i>Exhibition Booths</i> while you wait for the programme to start
OPENING SESSION	
08:30 – 08:40	INTRODUCTION – Prof James Maina, Conference Chairman
08:40 – 08:50	WELCOME – Mr Philip Hendricks, Chairman, ATC Board
08:50 – 09:20	OPENING ADDRESS - Hon Fikile Mbalula, Minister of Transport
09:20 – 09:50	PLENARY ADDRESS – Mr Zolani Matthews, PRASA, CEO
09:50 – 10:10	COMFORT BREAK

DELEGATES BREAK INTO PARALLEL SESSIONS

AFTER THE COMFORT BREAK MONDAY, 05 JULY

07:30 - 08:30	DELEGATES LOG IN
08:30 - 09:50	OPENING SESSION
09:50 - 10:10	COMFORT BREAK
SESSION 1A – INFRASTRUCTURE	
10:10 – 10:30	ANALYTICAL TECHNIQUES TO QUANTIFY MODIFIERS IN BITUMEN FOR THE SOUTH AFRICAN ASPHALT PAVEMENT INDUSTRY – A Makhari , Anton Paar SA, N Hawes and G Mturi, CSIR Smart Mobility and V Ojjo, CSIR Nanomaterials Industry Development Facility
10:30 – 10:50	LABORATORY EVALUATION OF ALTERNATIVE COST-EFFECTIVE PAVEMENT MATERIALS – M Smit and I Akhalwaya, CSIR Smart Mobility and F Rust, Pavement Engineering Research Consultancy
10:50 – 11:10	CURING RATES OF EMULSION-TREATED KALAHARI SAND BASES – F Netterberg
11:10 – 11:30	COMFORT BREAK
11:30 – 11:50	MAINTENANCE AND REPAIR SPENDING REALITIES: WHAT CAN BE DONE? - K Wall , University of Pretoria
11:50 – 12:10	REFORMING THE NAMIBIAN ROAD USER CHARGING SYSTEM TOWARDS A SUSTAINABLE FUNDING - HN Petrus and S Krygsman, Stellenbosch University
12:10 – 12:30	CREATING AN INTEGRATED PROVINCIAL ROAD ASSET MANAGEMENT SYSTEM (RAMS) USING OPEN SOURCE TECHNOLOGY - PM Du Plessis and A Breytenbach, CSIR Smart Places, I Sallie, V De Franca and M Kemp, CSIR Smart Mobility, S Russell and S Redelinghuys, SMEC
12:30 – 13:00	AWARD CEREMONY
	End of day 1

MONDAY, 05 JULY

07:30 - 08:30	DELEGATES LOG IN
08:30 - 09:50	OPENING SESSION
09:50 - 10:10	COMFORT BREAK
SESSION 1B – URBAN AND PUBLIC TRANSPORT	
10:10 – 10:30	AN EVIDENCE BASED ANALYSIS OF ORTHOGONAL AND EFFICIENT EXPERIMENTAL DESIGNS FOR TRANSPORTATION STATED PREFERENCE SURVEYS - G Hayes , University of Pretoria
10:30 – 10:50	TRAVEL BEHAVIOUR AND ATTITUDES OF YOUNG PEOPLE IN THE JOHANNESBURG METROPOLITAN AREA, SOUTH AFRICA – GJ Heyns and R Luke, University of Johannesburg
10:50 – 11:10	THE CHALLENGE OF SOCIO-ECONOMIC DATA FOR THE WESTERN CAPE TRAVEL AND LAND USE MODEL - F Contiero , Bentley Systems Inc. Germany and WG Allen, Bentley Systems Inc. USA
11:10 – 11:30	COMFORT BREAK

11:30 – 11:50	THE NEED FOR A PROVINCIAL LAND USE AND TRAVEL FORECASTING MODEL - WG Allen , Bentley Systems Inc. USA and D Martheze, Western Cape Department of Transport and Public Works
11:50 – 12:10	WESTERN CAPE LAND USE MODEL OVERVIEW - P Donoso , L Gutiérrez and F Saavedra, Universidad de Chile, Chile and F Contiero, Bentley Systems Inc. Germany
12:10 – 12:30	AN INNOVATIVE TRAVEL MODEL SYSTEM FOR WESTERN CAPE - WG Allen , Bentley Systems Inc. USA and F Contiero, Bentley Systems Inc. Germany
12:30 – 13:00	AWARD CEREMONY
	End of day 1

MONDAY, 05 JULY

07:30 - 08:30	DELEGATES LOG IN
08:30 - 09:50	OPENING SESSION
09:50 - 10:10	COMFORT BREAK
SESSION 1C – AVIATION	
10:10 – 10:30	SUSTAINABLE AVIATION: GLOBAL TRENDS, DRIVERS AND ACTIVITIES IN “GREEN” AVIATION TECHNOLOGIES - K Naidoo , CSIR Aeronautics Systems
10:30 – 10:50	TAKING OFF: UNDERSTANDING THE SUSTAINABLE AVIATION BIOFUEL POTENTIAL IN SUB-SAHARAN AFRICA; A SYSTEM ANALYSIS INVESTIGATION INTO THE CURRENT AND FUTURE POTENTIAL FOR SUSTAINABLE BIOFUEL FEEDSTOCK PRODUCTION IN THE SUB-SAHARAN AFRICA REGION - T Bole Rentel , Worldwide Fund for Nature South Africa (WWF-SA), G Fisher, S Tramberend and H van Velthuizen, International Institute for Applied Systems Analysis (IIASA), Austria
10:50 – 11:10	MARGINAL CLIMATE AND AIR QUALITY COSTS OF AVIATION EMISSIONS - C Grobler
11:10 – 11:30	COMFORT BREAK
11:30 – 11:50	INTEGRATING DRONES INTO BUSINESS PROCESSES OF CORPORATES, GOVERNMENT DEPARTMENTS AND MUNICIPALITIES - S Twala
11:50 – 12:10	SAFE DRONE OPERATIONS - A Meredith
12:10 – 12:30	AERODROME FUNCTIONS, CHALLENGES AND OPPORTUNITIES WITHIN THE NORTH WEST AVIATION SYSTEM - J A Moolman , Zutari and A Baikgaki, North West Department of Community Safety and Transport Management
12:30 – 13:00	AWARD CEREMONY
	End of day 1

MONDAY, 05 JULY

07:30 - 08:30	DELEGATES LOG IN
08:30 - 09:50	OPENING SESSION
09:50 - 10:10	COMFORT BREAK
SESSION 1D– MARITIME	

10:10 – 10:30	THE IMPACT OF PORT PERFORMANCE AND TRADE: THE CASE OF SELECTED AFRICAN STATES - C Mlambo
10:30 – 10:50	NOT THE ONLY SHERIFF IN TOWN: A COMPARISON OF REGIONAL PORT BEST PRACTICES - A Pike , Bowmans
10:50 – 11:10	THE USE OF DRONES IN PORTS - S Smith-Godfrey , CSIR Smart Mobility
11:10 – 11:30	COMFORT BREAK
11:30 – 11:50	BLUE OCEANS ECONOMY AND TRANSPORT SECTOR. A SYMBIOTIC RELATIONSHIP BETWEEN TOURISM AND TRANSPORT SECTOR (ANALYSIS AND OPPORTUNITIES) - K Khumalo , Mzansi SCUBA Diving Academy
11:50 – 12:10	PARTNERS IN BUILDING A MARITIME NATION - T Taoana-Mashiloane , South African Maritime Safety Authority
12:10 – 12:30	FOSTERING A PARTNERSHIP MINDSET: GOVERNANCE AND EDUCATION, M E Manuel , World Maritime University, Sweden
12:30 – 13:00	AWARD CEREMONY
	End of day 1

MONDAY, 05 JULY

07:30 - 08:30	DELEGATES LOG IN
08:30 - 09:50	OPENING SESSION
09:50 - 10:10	COMFORT BREAK
SESSION 1E – TREASURY SESSION: PUBLIC TRANSPORT AND SPATIAL TRANSFORMATION	
10:10 – 10:30	PROGRESS ON THE IMPLEMENTATION OF SPATIAL TRANSFORMATION AGENDA IN TREASURY'S CITIES SUPPORT PROGRAMME II – M Matolong , National Treasury Cities Support Programme
10:30 – 10:50	CAUSAL LOOP DIAGRAMS FOR SPATIAL TRANSFORMATION IN SOUTH AFRICAN CITIES – F Aswiimwe , CSIR
10:50 – 11:10	PUBLIC INVESTMENT CORPORATION APPROACH TO INVESTING FOR TRANSFORMATION - PIC
11:10 – 11:30	COMFORT BREAK
11:30 – 11:50	NOTABLE TRENDS IN OFFICE VACANCY RATES IN SOUTH AFRICAN CITIES - N Gopal , South African Property Owners Association
11:50 – 12:10	SPATIAL TRANSFORMATION THROUGH INCLUSION OF THE TOWNSHIP ECONOMY - K Harrison , National Treasury Cities Support Programme
12:10 – 12:30	MANAGEMENT OF INFORMAL SETTLEMENTS UPGRADES FOR SUSTAINABLE MOBILITY - S Maqetuka , National Treasury Cities Support Programme
12:30 – 13:00	AWARD CEREMONY
	End of day 1

TUESDAY, 06 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Mr Nico McLachlan; Organisation Development Africa (ODA)
09:00	Plenary breaks up into parallel sessions
SESSION 2A – INFRASTRUCTURE	
09:00 – 09:20	GYP SUM IN SALINE AND NON-SALINE ROAD BASES: EFFECTS AND LIMITS DERIVED FROM LONG-TERM ROAD EXPERIMENTS IN NAMIBIA – F Netterberg
09:20 – 09:40	THE ORAPA EMULSION-TREATED KALAHARI SAND EXPERIMENT : PERFORMANCE OVER 30 YEARS AND DERIVED MATERIAL AND PAVEMENT DESIGNS - F Netterberg , MI Pinard, InfraAfrica and KJR Motswagole, KJR Motswagole And THE ORAPA UNTREATED KALAHARI SAND BASE EXPERIMENT: PERFORMANCE OVER 30 YEARS AND DERIVED MATERIAL AND PAVEMENT DESIGNS - F Netterberg , MI Pinard, InfraAfrica and KJR Motswagole, KJR Motswagole
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	DIGITAL VIDEO ASSESSMENT (DVA) AS CATALYST FOR SKILL TRANSFER IN THE ROAD- AND AIRPORT VISUAL CONDITION SURVEY ENVIRONMENT IN RSA - A Cromhout, E Horak and T Du Toit, JG Afrika, D Van der Merwe, ScienceWare and J Maina, University of Pretoria
10:20 – 10:40	A COMPARATIVE EVALUATION OF THE STRUCTURAL CAPACITY OF CRACKED AND UNCRACKED FLEXIBLE PAVEMENTS USING MECHANISTIC EMPIRICAL METHODS BASED ON DEFLECTION MEASUREMENTS BY THE FALLING WEIGHT DEFLECTOMETRE (FWD) AND A TRAFFIC SPEED DEFLECTOMETRE DEVICE (TSDD) - HJ Visser and SR Tetley, VNA Consulting
10:40 – 11:00	APPLICATION OF DRONES AND IMAGE PROCESSING FOR BRIDGE INSPECTIONS IN SOUTH AFRICA - L Kemp , MP Roux and M Kemp, CSIR Smart Mobility and R Kock, Premier Mapping Africa
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Prof Fred Wegman; Delft University of Technology
11:50 – 12:10	RISK-BASED LIFECYCLE ANALYSIS FOR ROAD STRUCTURES. THE BENEFIT OF AN IMPROVED RISK-BASED FUNDING ALLOCATION METHOD FOR MAINTENANCE AND REHABILITATION OF ROAD STRUCTURES UNDER BUDGET CONSTRAINTS - CG Papadouris , J Gerber, CJ Von Holdt and HJ Niehaus, Zutari (Pty) Ltd
12:10 – 12:30	DETERMINATION OF A FUNCTIONAL INDEX FOR BRIDGES - SN Ndungane , CSIR Built Environment
12:30 – 12:50	THE JOURNEY TOWARDS AUTONOMOUS FULL SPECTRUM PAVEMENT CONDITION DATA ACQUISITION AND EVALUATION IN SOUTH AFRICA: A ROAD LESS TRAVELLED - T Moolla and S Tetley, ARRB Systems Africa
	End of day 2

TUESDAY, 06 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Mr Nico McLachlan; Organisation Development Africa (ODA)
09:00	Plenary breaks up into parallel sessions

SESSION 2B – URBAN AND PUBLIC TRANSPORT

09:00 – 09:20	REPRESENTING PUBLIC TRANSPORT SERVICES IN A REGIONAL TRAVEL MODEL - WG Allen, Bentley Systems Inc. USA and F Contiero , Bentley Systems Inc. Germany
09:20 – 09:40	NETWORK ACCESSIBILITY STUDY TO EVALUATE THE EXTENT OF PUBLIC TRANSPORT COVERAGE IN HARARE METROPOLITAN AREA - NT Zhuwaki and J Coetzee, GoMetro SA Pty Ltd
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	DECARBONISING PASSENGER TRANSPORT: BRT OPTIONS, INFRASTRUCTURE, AND COLLABORATIVE PRIORITIES - LS Mapamba and N Pisa, University of Johannesburg
10:20 – 10:40	SEGMENTING THE BRT MARKET IN UNEQUAL SOCIETIES: LESSONS FOR SOUTH AFRICA FROM LITERATURE - NJW van Zyl, N Cheure , G Hayes and C Venter, University of Pretoria
10:40 – 11:00	A CASE STUDY OF MATATU CASHLESS FARE COLLECTION INITIATIVES IN NAIROBI - AT Aruho and R Behrens, University of Cape Town, W Mitullah and A Kamau, University of Nairobi, Kenya
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Prof Fred Wegman; Delft University of Technology
11:50 – 12:10	MEASURING HOW LONG PASSENGERS WAIT TO DEPART IN MINIBUS TAXIS - OH Mokwena , North-West University
12:10 – 12:30	MODELLING THE IMPACT OF PRIORITY INFRASTRUCTURE ON THE PERFORMANCE OF MINIBUS-TAXI SERVICES IN SOUTHERN AFRICA - LR de Beer and CJ Venter, University of Pretoria
12:30 – 12:50	
	End of day 2

TUESDAY, 06 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Mr Nico McLachlan; Organisation Development Africa (ODA)
09:00	Plenary breaks up into parallel sessions
SESSION 2C – CAPACITY BUILDING/ TRANSPORT FOR RURAL DEVELOPMENT	
09:00 – 09:20	
09:20 – 09:40	
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	
10:20 – 10:40	
10:40 – 11:00	
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Prof Fred Wegman; Delft University of Technology
11:50 – 12:10	
12:10 – 12:30	
12:30 – 12:50	
	End of day 2

TUESDAY, 06 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Mr Nico McLachlan; Organisation Development Africa (ODA)
09:00	Plenary breaks up into parallel sessions
SESSION 2D – FREIGHT AND LOGISTICS	
09:00 – 09:20	PLANNING AND ELASTICITY PARAMETERS FOR TRAIN USE – LEARNING FROM THE DETERIORATION OF PRASA METRORAIL - P Onderwater , Hatch Africa
09:20 – 09:40	THE TASK OF RESTORING TRAIN SERVICES IN PRIORITY CORRIDORS AMID UNPRECEDENTED LEVEL OF THEFT AND VANDALISM – F Marutla , PRASA
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	COMPARING DYNAMIC ROAD WEAR OF A PERFORMANCE- BASED STANDARDS AND BASELINE VEHICLE - AJ Steenkamp , CSIR Smart Mobility, CC de Saxe, CSIR Smart Mobility and University of the Witwatersrand, F Kienhöfer, University of the Witwatersrand and L Kemp, CSIR Smart Mobility
10:20 – 10:40	A CASE FOR HIGH CAPACITY COAL TRUCKS TO REDUCE COSTS AND EMISSIONS AT ESKOM - CC de Saxe , CSIR Smart Mobility and University of the Witwatersrand, J van Eeden, University of Stellenbosch, A Steenkamp, SCIR Smart Mobility, O Mokone, University of Stellenbosch
10:40 – 11:00	OPERATING COSTS: PBS VS CONVENTIONAL HEAVY VEHICLES IN SOUTH AFRICA - AJ Steenkamp , K Venter, C de Saxe and L Kemp, CSIR Smart Mobility
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Prof Fred Wegman; Delft University of Technology
11:50 – 12:10	CLASSIFICATION OF TRUCKS USING CAMERA DATA - O Mokone, University of the Witwatersrand and CC de Saxe , CSIR Smart Mobility
12:10 – 12:30	STABILITY CONTROL OF ARTICULATED VEHICLES USING BRAKE-BASED TORQUE VECTORING - JB Catterick , TR Botha and PS Els - University of Pretoria
12:30 – 12:50	ANALYSIS OF THE RELATIONSHIP BETWEEN AIR TRANSPORT AND ECONOMIC GROWTH IN SUB-SAHARAN AFRICA - C Chakamera and N Pisa, University of Johannesburg
End of day 2	

TUESDAY, 06 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Mr Nico McLachlan; Organisation Development Africa (ODA)
09:00	Plenary breaks up into parallel sessions
SESSION 2E – TRAFFIC MANAGEMENT, SAFETY AND SECURITY	
09:00 – 09:20	INFLUENCE OF ROAD GEOMETRIC AND TRAFFIC FEATURES ON ROAD SAFETY - R Ambunda and M Sinclair, University of Stellenbosch
09:20 – 09:40	THE IMPACT OF ROAD SHOULDERS ON URBAN FREEWAYS: A CASE STUDY IN DURBAN, SOUTH AFRICA - S Mkulisi and M Sinclair, University of Stellenbosch

09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	THE DEVELOPMENT OF ROAD SAFETY ASSESSMENT SCREENING PROCEDURES FOR THE CITY OF TSHWANE METROPOLITAN MUNICIPALITY - A Sarjoo , City of Tshwane Metropolitan Municipality and D Allopi, Durban University of Technology
10:20 – 10:40	THE UTILITY OF THE IRAP STAR RATING SYSTEM IN ASSESSING – AND POTENTIALLY CHANGING - THE SAFETY LEVEL OF RURAL ROAD INTERSECTIONS - C Cavanagh and M Sinclair, University of Stellenbosch
10:40 – 11:00	THE USE OF FIFTH GENERATION NETWORKS (5G) TO IMPROVE ROAD SAFETY IN SOUTH AFRICA: A COMPARATIVE STUDY - ML Kwange , PL Binda and K Muronga, CSIR Smart Mobility
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Prof Fred Wegman; Delft University of Technology
11:50 – 12:10	INVESTIGATIONS AND PROPOSALS FOR INVESTIGATORY LEVEL REQUIREMENTS FOR SKID RESISTANCE OF SOUTH AFRICA'S ROADS - K Naidoo , N Zungu and T Lewis, ARRB Systems SA
12:10 – 12:30	THE EFFECTIVENESS OF SPEED HUMPS AS TRAFFIC CALMING FOR ACCIDENT REDUCTION - L Monyatsi , eThekweni Municipality
12:30 – 12:50	THE IMPLEMENTATION OF THE HOLISTICALLY INTEGRATED MULTIDISCIPLINARY SCIENTIFIC MANAGEMENT MODEL (HIMSMM) FOR 2030 - SB Mohlala , Analogy Consulting Experts
	End of day 2

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3A – 8th CHINA-AFRICA CO OPERATION FORUM	
09:00 – 09:20	REPORT OF THE JOINT RESEARCH CENTER (JRC) ON SMART TRANSPORT AND SUSTAINABLE INFRASTRUCTURE BETWEEN SA AND CHINA - Y Wang , SACTCC (South Africa-China Transport Co-operation Center) and Invited key officer from the Department of Science and Innovation (DSI) and the Department of Transport (DoT)
09:20 – 09:40	ONLINE TRAINING AND DIGITAL EDUCATION WITH A CASE STUDY BETWEEN SOUTH AFRICA, AFRICA AND CHINA - J Grundling , SETEA(Science, Engineering & Technology and Education Association between Southern Africa and China)
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	CURRENT STATUS OF INTELLIGENT TRANSPORT DEVELOPMENT IN BEIJING AND WHOLE CHINA - Invited Chinese embassy to South Africa/or China Intelligent Transport Society, Headquarters located in Beijing AFRICA'S TRANSPORT DEVELOPMENT IN MOZAMBIQUE AND CO-OPERATION WITH CHINA UNDER THE BELT AND ROAD INITIATIVE(BRI) - Invited Mozambique's embassy to South Africa To be confirmed by 26 April
10:20 – 10:40	FRAMEWORK ON THE NATIONAL STANDARDS OF THE FULL SCALE AND 1/3 SCALE MLSS IN CHINA - C Wu , Guangdong Hualu Transport Technology Co, Ltd, C Zhuang and Y Wang , International Society of the Mobile Load Simulator(ISMLS)

10:40 – 11:00	APPLYING THE FULL SCALE MOBILE LOAD SIMULATOR(MLS) TO TEST ON EXPRESSWAYS IN JIANGSU PROVINCE(EASTERN CHINA) AND 1/3 SCALE MLS IN GUANGXI AUTONOMOUS REGION (SOUTHWESTERN CHINA) - C Wu , Jiangsu Transport Institute
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	USING 1/3 SCALE ACCELERATED PAVEMENT TESTING TOOL TO LOAD ON QINGCHUAN ROCK ASPHALT IN SHANDONG, CHINA - C Zhuang, Y Ye , Shandong Jiaotong University
12:10 – 12:30	RESEARCH AND INNOVATION ON FULL SCALE AND 1/3 SCALE APT TOOLS IN SOUTHEAST UNIVERSITY - X Gu , Southeast University
12:30 – 12:50	RESEARCH AND INNOVATION ON FULL SCALE AND 1/3 SCALE APT TOOLS IN CHANG'AN UNIVERSITY - J Zhang , Chang'an University
	End of day 3

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3B – PUBLIC PRIVATE PARTNERSHIPS (PPP) WORKSHOP	
09:00 – 09:20	INDIA'S TRANSPORT INFRASTRUCTURE INVESTMENT IN AFRICAN PPP PROJECTS - S Choudhary , Export Import Bank of India
09:20 – 09:40	HOW SUCCESSFUL ROAD AND RAIL PPPS WERE ROLLED OUT IN SOUTH AFRICA FROM A NATIONAL PERSPECTIVE - L Dimitrov , DBSA
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	TRANSPORT PPP'S OPPORTUNITIES IN WEST AFRICA/NIGERIA - S Ibrahim , PwC, Nigeria
10:20 – 10:40	RAIL PPP'S OPPORTUNITIES IN SOUTH AFRICA - J Holley , Traxtion
10:40 – 11:00	ROLLOUT OF TRANSPORT PPP OPPORTUNITIES IN THE DEMOCRATIC REPUBLIC OF CONGO - C Lukusa , Momentum Attorneys & Advisors
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	PUBLIC PRIVATE PARTNERSHIPS IN URBAN TRANSPORT AND HOW TO APPROACH THEM - P Neves , World Bank
12:10 – 12:30	PUBLIC PRIVATE PARTNERSHIPS IN ROADS AND HOW TO APPROACH THEM - P Neves , World Bank
12:30 – 12:50	To be confirmed
	End of day 3

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3C – IMPLEMENTATION OF INTEGRATED PUBLIC TRANSPORT NETWORKS	
09:00 – 09:20	A COST EFFECTIVE PUBLIC TRANSPORT MANAGEMENT SYSTEM FOR GO! DURBAN - A Aucamp , Urban Traffic Control eThekweni Transport Authority, S Govender, eThekweni Municipality, M van Tonder, Zutari, J Winstanley, Online Systems CC and C Morgan, Netstar
09:20 – 09:40	CAPE TOWN URBAN DEVELOPMENT INDEX A RUBRIC FOR URBAN TRANSFORMATION - LA Stolworthy , City of Cape Town, C Krogscheepers, ITS Global and C Rabe, PDG
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	LOCATION ANALYSIS OF PRIVATE SCHOOLS: A MOVE TOWARDS DATA-DRIVEN INSIGHT - BA Coetzer , SC Krygsman and T de Jong, Stellenbosch University
10:20 – 10:40	DIGITISATION OF THE REGULATED MINIBUS TAXI NETWORK: A CASE FOR GAUTENG PROVINCE - S Mhlanga and K Muronga, CSIR Smart Mobility, M Ndamase, Gauteng Dept of Roads and Transport
10:40 – 11:00	To be confirmed
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	THE SOCIAL PERCEPTION AND HOLISTIC ASSESSMENT OF BUS RAPID TRANSIT IN SOWETO - MJWA Vanderschuren and L Molefe , University of Cape Town
12:10 – 12:30	PROGRESS WITH THE IMPLEMENTATION OF IPTNS IN SOUTH AFRICAN CITIES – Department of Transport
12:30 – 12:50	QUESTIONS TO CITIES AND THE DEPARTMENT OF TRANSPORT ON THE IPTN IMPLEMENTATION PROGRESS
End of day 3	

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3D – CLIMATE CHANGE WORKSHOP	
09:00 – 09:05	WELCOME AND INTRODUCTION – B Verhaeghe , CSIR Smart Mobility
09:05 – 09:40	AN OVERVIEW OF CLIMATE CHANGE IN SOUTH AFRICA – F Engelbrecht , University of the Witwatersrand
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	RECAP CLIMATE ADAPTATION PROJECTS

10:20 – 10:40	LESSONS LEARNED BY THE INFRASTRUCTURE AND CLIMATE NETWORK (ICNet) – Jo E Sias , ICNet
10:40 – 11:00	CLIMATE ADAPTATION FOR SOUTH AFRICAN TRANSPORT INFRASTRUCTURE – R Mokoena , CSIR Smart Mobility
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	NATIONAL CLIMATE CHANGE ADAPTATION STRATEGY – S Mbanjwa , National Department of Environment, Forestry and Fisheries
12:10 – 12:30	A MUNICIPAL APPROACH TO CLIMATE CHANGE POLICY DEVELOPMENT AND IMPLEMENTATION – F Lambert , City of Tshwane
12:30 – 12:50	RESOLUTIONS: TOWARDS THE CLIMATE RESILIENCE OF SOUTH AFRICAN TRANSPORT INFRASTRUCTURE – B Verhaeghe , CSIR BE
	End of day 3

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3E – ROAD SAFETY ENGINEERING WORKSHOP / TRAFFIC ENGINEERING	
09:00 – 09:20	UNPACKING THE TECHNICAL AND PERCEPTION BARRIERS TO ELECTRIC VEHICLE UPTAKE IN SOUTH AFRICA - BK Manu and SC Krygsman, Stellenbosch University
09:20 – 09:40	MODELLING DRIVERS ABERRANT RESPONSIVENESS TO YELLOW INTERVAL: CASE STUDY OF DURBAN SIGNALIZED INTERSECTIONS - J Oyaroa , S Bulose and J Ben-Edigbe, University of KwaZulu-Natal
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	SMALL-CITY TRAFFIC MANAGEMENT USING UNMANNED AERIAL VEHICLES (UAVS) - R Ebrahim , MM Bruwer and SJ Andersen, Stellenbosch University
10:20 – 10:40	MEASURING THE IMPACT OF ROADWORKS ON TRAFFIC PROGRESSION USING FLOATING CAR DATA - MM Bruwer and SJ Andersen, Stellenbosch University, W Merrick, Nelson Mandela Bay Municipality
ESSF SEMINAR/ WORKSHOP	
10:40 – 11:00	INTRODUCTION TO ESSF SEMINAR/WORKSHOP - HAZARDOUS LOCATION IDENTIFICATION AND IMPROVEMENT IN CONTEXT - D Adams
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	BEYOND HAZARDOUS LOCATION IDENTIFICATION – SAFETY PERFORMANCE EVALUATION STATE OF PRACTICE – G Schermers , SWOV
12:10 – 12:30	ROADSIDE DESIGN – THE SAFE SYSTEM PARADIGM - C Krogscheepers , ITS
12:30 – 12:50	ROAD RESTRAINT SYSTEM – STATE OF PRACTICE - M Sematlane and L Roodt TRAFFIC CONFLICT TECHNIQUES – STATE OF PRACTICE - C Milligan , MicroTraffic, Canada
	End of day 3

WEDNESDAY, 07 JULY

07:30 - 08:30	REGISTRATION
08:30 - 09:00	PLENARY ADDRESS: Ms Susanna Zammataro; INTERNATIONAL ROAD FEDERATION
09:00	Plenary breaks up into parallel sessions
SESSION 3F – IMPACT OF COVID-19 ON WOMEN AND SMALL BUSINESS	
09:00 – 09:20	To be Confirmed
09:20 – 09:40	REFLECTION ON COVID AND INCREASING PARTNERSHIPS- R Moosajee ,The barefoot facilitator
09:40 – 10:00	COMFORT BREAK
10:00 – 10:20	THE IMPACT OF COVID-19 ON INFORMAL AND FORMAL CROSS BORDER-TRADE ON FEMALE TRADERS - L Sommer ,United Nations Economic Commission for Africa
10:20 – 10:40	THE EFFECT OF COVID19 TRANSPORT REGULATIONS ON COMMUTERS - L Mokoma , CSIR
10:40 – 11:00	TRANSPORTATION CONCESSIONS - ELIXIR TO SUSTAINABLE TRANSPORTATION AND ECONOMIC EMPOWERMENT OF THE MARGINALISED” - L Mabece , Bulumko Corporate law Advisors
11:00 – 11:20	COMFORT BREAK
11:20 – 11:50	PLENARY ADDRESS: Ms Heidi Bartis; SOUTH AFRICAN BREWERIES
11:50 – 12:10	WOMEN'S FINANCIAL INCLUSION IN THE TRANSPORT INDUSTRY- M Mantshwane , National department of transport
12:10 – 12:30	CHALLENGES THAT WOMEN ARE FACING IN TRANSPORT PROCUREMENTS - R Pole-Nkosi , Tshwane Women in Transport (TWIT)
12:30 – 12:50	“POST-COVID-19 RECOVERY IN THE CAB SECTOR IN SOUTH AFRICA – AN OPPORTUNITY TO GET WOMEN IN THE DRIVING SEAT” - A van der Merwe - Green Cab
	End of day 3

Please note that this is a DRAFT Programme and may be subject to some alterations before the Conference.

Please register on-line at www.satc.org.za

We look forward to welcoming you at SATC 2021