



University of the Philippines  
**LOS BAÑOS**

## Transportation Science Society of the Philippines (TSSP) 31st Annual Conference

*TSSP in cooperation with the*

**Department of Civil Engineering  
College of Engineering and Agro-Industrial Technology  
University of the Philippines Los Baños**



**Theme: “Driving Smart Mobility Change: Innovations, Equity and Climate  
Resilience for a Connected Sustainable Future”**

4 December 2025 (Thursday)

SEARCA Complex, U.P. Los Baños, College, Laguna

### **PROGRAM**

Time	Activity
8:00 – 9:00 AM	Registration (Sam Arng Room)
<b>Plenary Session (Umalí Auditorium)</b>	
9:00 – 9:30 AM	Opening Program - Invocation - National Anthem - Opening Remarks: <b>Dr. Ma. Sheilah G. Napalang</b> President, TSSP - Messages <b>Hon. Neil Andrew N. Nocon</b> Mayor, Municipality of Los Baños, Laguna  <b>Dr. Jose V. Camacho Jr.</b> Chancellor, U.P. Los Baños
9:30 – 10:30 AM	Introduction of the Keynote Lecturer: Dr. Daniel L. Mabazza Board Member, TSSP  Keynote Lecture: <i>Beyond Models: Understanding Transportation as a Complex Adaptive System in the Age of AI</i>  <b>Dr. Christopher P. Monterola</b> Professor Aboitiz Chair in Data Science Head, Aboitiz School of Innovation, Technology, and Entrepreneurship Executive Managing Director, ACCeSs@AIM Academic Program Director, PhD in Data Science Asian Institute of Management (AIM)
10:30-10:45 AM	Picture-Taking & Coffee Break



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Time	Activity
<b>Plenary Session (Umali Auditorium)</b>	
10:45-11:45 AM	<p>Panel Discussion/Presentation</p> <p><i>Theme: <b>Ensuring Equity in Pursuit of Smart Mobility</b></i></p> <p><b>Mr. Wilhansen Joseph Li</b> Co-Founder, CTO Sakay Mobility Philippines Corp.</p> <p><b>Dr. Daniel Oviedo Hernandez</b> Associate Professor, Development Planning Unit University College London</p> <p><b>Dr. Noriel Christopher C. Tiglao</b> Professor, National College of Public Administration and Governance, University of the Philippines Diliman Co-founder, SafeTravelPH Mobility Innovations Organization Inc.</p> <p>Moderator: <b>Dr. Crispin Emmanuel D. Diaz</b>, Secretary, TSSP</p>
11:45 - 12:00 NN	Open Forum
12:00 - 1:30 PM	<b>Lunch (Makiling Lounge)</b>

*Program Facilitators:*

**Mr. Julshabar U. Halil and Mr. Junievin R. Ramillano**  
Associate Members, TSSP



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Time	Activity
1:30 – 2:30 PM	<p>Technical Session 1: <b>Traffic Engineering &amp; Management 1</b> Session Room 1: Saguiguit Room</p> <p>Chair: <i>Dr. Sandy Mae A. Gaspay, TSSP Vice-President</i></p> <ul style="list-style-type: none"><li>• 18-Measuring the Traffic Impacts of Tactical Urbanism: A Corridor and Intersection Analysis in Quezon City <b>[Mark Laurence MICIANO, UPD]</b></li><li>• 15-S-Park: Smart Parking System for Real-Time Tracking and Congestion Mitigation Validated Through PTV Vissim Simulation <b>[Ralph Angelo ESTILLER, Cagayan State University]</b></li><li>• 21-Estimation of Passenger Car Unit Values of Vehicles in Urban Arterial Roads Based on the Influence of the Neighboring Vehicles <b>[Hamja JAAFAR, Zamboanga Peninsula Polytechnic State University]</b></li><li>• 31-Determining an Optimal Intersection Traffic Management Design Through Microsimulation <b>[Lindy Jane ANDO, Visayas State University]</b></li></ul>



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### **PROGRAM**

Time	Activity
1:30 – 2:30 PM	<p>Technical Session 2: <b>Transport Planning 1</b> Session Room 2: Umali Auditorium</p> <p>Chair: <i>Dr. Daniel L. Mabazza, TSSP Board Member</i></p> <ul style="list-style-type: none"><li>• 13-Modelling Airport Noise Pollution &amp; Its Potential Impacts on Public Health: A Case Study of Tuguegarao Domestic Airport <b>[Ralph Angelo ESTILLER, Cagayan State University]</b></li><li>• 11-Developing an MS-Excel Based Tool for Multi-Regional Economic Assessment Using an Input-Output Approach: Case of the Philippine Regional Transport Infrastructure Development <b>[Krister Ian Daniel ROQUEL, National University]</b></li><li>• 16-Understanding Inland Water Transportation and Exploring Its Role in Tourism: the Case of Navotas – Malabon River Boats, Metro Manila, Philippines for Sustainable and Resilient Transport <b>[Patricia Joy AMIDAO, U.P. Diliman]</b></li><li>• 32-Development of a National Travel Time and Delay Survey Methodology using Smartphone-based Data Collection System <b>[Noriel Christopher TIGLAO, U.P. Diliman]</b></li></ul>



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Time	Activity
1:30 – 2:30 PM	<p>Technical Session 3: <b>Transport Policy</b> Session Room 3: Drilon Hall</p> <p>Chair: <i>Dr. Ma. Sheilah G. Napalang, TSSP President</i></p> <ul style="list-style-type: none"><li>• 09-Public Transport Modernization Program in Nueva Ecija: Benefits, Challenges, and Recommendations in Transitioning from Traditional to Modern Public Utility Jeepney <b>[Francis Harvey VALDEZ, Central Luzon State University]</b></li><li>• 12-From Patchwork to Perspicacity: Fare Setting for Multimodal Transit in Developing Countries <b>[Rene SANTIAGO, Bellwether Advisory]</b></li><li>• 14-Assessing PUV Modernization Program Industry Consolidation and Financing Towards Just Transition for Transport Workers <b>[Ramir Seraphim ANGELES, Move As One Coalition]</b></li><li>• 20-Empowering LGUs in Public Transport Provision through Franchise Policy Reform <b>[Jose Alvaro PACHECO, The Asia Foundation]</b></li></ul>



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Time	Activity
2:30 - 3:30 PM	<p>Technical Session 4: <b>Traffic and Weather</b> Session Room 1: Saguiguit Room</p> <p>Chair: <i>Dr. Ernesto B. Abaya, TSSP Regular Member</i></p> <ul style="list-style-type: none"><li>• 22-Impacts of Extreme Flooding Event on the Volume-to-Capacity Ratio of Major Road Networks: The Case of Tuguegarao City <b>[Ralph Angelo ESTILLER, Cagayan State University]</b></li><li>• 28-Calibration and Validation of a Weather–responsive Estimation and Prediction System of a Macroscopic Traffic Flow Model <b>[Hanzel MEJIA, Visayas State University]</b></li><li>• 29-Empirical Proof of the Characteristics of the Queue Discharge Rate under Different Rainfall Conditions on an Active On-Ramp Bottleneck <b>[Hanzel MEJIA, Visayas State University]</b></li></ul>
3:30 - 3:45 PM	Coffee Break



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Time	Activity
2:30 - 3:30 PM	<p>Technical Session 5: <b>Transport Planning 2</b> Session Room 2: Umali Auditorium</p> <p>Chair: <i>Dr. Marie Danielle V. Guillen, TSSP Board Member</i></p> <ul style="list-style-type: none"><li>• 23-Comparative Analysis of Transportation Mode Choices Between Students of the University of the Philippines Diliman (UPD) and the Ateneo de Manila University (ADMU) <b>[Crisaulo REYNOSO, U.P. Los Baños]</b></li><li>• 33-Exploring the Role of UP Campus as a Living Lab for Sustainable and Resilient Transport <b>[Noriel Christopher TIGLAO, U.P. Diliman]</b></li><li>• 34-The Influence of School Travel Conditions on Academic Achievement and Well-Being of Schoolchildren: A Multi-Method Approach <b>[Karen Joyce SANTIAGO, De La Salle University]</b></li></ul>
3:30 - 3:45 PM	Coffee Break





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Time	Activity
2:30 - 3:30 PM	<p>Technical Session 6: <b>Public Transport 1</b> Session Room 3: Drilon Hall</p> <p>Chair: <i>Dr. Mark Joel B. Uaje, TSSP Associate Member</i></p> <ul style="list-style-type: none"><li>• 01-Enhancement and Application of the Mode Transfer Quality Index (MTQI): The Case of MRT-3 <b>[Adrian DAYON, U.P. Diliman]</b></li><li>• 02-Optimizing Route-based Fleet Size Computation through Network-Based Modeling for Puerto Princesa City, Philippines <b>[Ann Camille FAJARDO, SafeTravelPH]</b></li><li>• 25-Improving Rural Accessibility through PUV Route Optimization: A Case Study of the Island Province of Guimaras <b>[Lance Kenneth MAMUYAC, De La Salle University]</b></li></ul>
3:30 - 3:45 PM	Coffee Break





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Time	Activity
3:45 - 4:15 PM	<p>Technical Session 7: <b>Public Transport 2</b> Session Room 2: Drilon Hall</p> <p>Chair: <i>Asst. Prof. Crisaulo M. Reynoso, TSSP Regular Member</i></p> <ul style="list-style-type: none"><li>• 24-ARIMA and ARIMAX Models for Analyzing and Forecasting Ridership of Light Rail Transit Line 2 in Metro Manila <b>[Ms. Chelsea Trinidad, U.P. Los Baños]</b></li><li>• 27-Life On Two Wheels: Assessing the Coping Mechanisms of Motorcycle Taxi Drivers Within Novaliches' Underground Economy <b>[James Patrick GONZALES, Polytechnic Univ. of the Philippines]</b></li></ul>



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3:45 - 4:30 PM	<p><b>Technical Session 8: Road Safety and Traffic Engineering</b> Session Room 3: Saguiguit Room</p> <p><i>Chair: Dr. Ma. Bernadeth B. Lim, TSSP Regular Member</i></p> <ul style="list-style-type: none"><li>• 03-Prevalence of Risky Riding Behaviors and Their Association with Traffic Rule Knowledge Among Occupational Motorcycle Riders in Metro Manila <b>[Samantha Emmanuelle DIMAYUGA, De La Salle University]</b></li><li>• 17-Analyzing Real-World Road Traffic Incident Data Collection and Management <b>[Maywadee SOYTONG, U.P. Diliman]</b></li><li>• Level of Service and Swept Path Analysis of J.P. Rizal St. - Bonifacio St. Intersection in Gumaca, Quezon, Philippines <b>[Jonathan ARGUELLES, U.P. Los Baños]</b></li></ul>



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<b>Plenary Session (Umali Auditorium)</b>	
4:30 – 5:30 PM	<b>Concluding Program</b>  Induction of New Members – <b>Dr. Karl B. N. Vergel</b> , Chair, TSSP Membership Committee  Awarding for Best Presentation and Best Paper  Closing Remarks – <b>Dr. Marloe B. Sundo</b> , Chair, TSSP 31st Conference Committee

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