Preliminary Program

10th International Visualization in Transportation Conference

Innovative Visualization Frontiers – November 3-4, 2022 – Washington, D.C.

Join us at the **10th International Symposium on Visualization in Transportation: Innovative Visualization Frontiers** on November 3-4 in Washington, D.C. We will explore the many opportunities and challenges of visualization in the diverse transportation industry while presenting examples of how visualization is transforming the way we work today.

Our keynote speakers include:

- **Chiqui Esteban:** Graphics Directory of The Washington Post
- **Craig Thor**: Chief Scientist, Turner-Fairbank Highway Research Center
- **Theresa-Marie Rhyne** will also present her highly popular **Workshop on Color Theory** during a special session on November 4.

Conversations will focus on:

- The many ways visualization can dramatically influence communication
- Problem solving and decision making
- Finding better ways to leverage digital practices and data to deliver and manage transportation systems
- And our ability to discover new insights into the world around us

Technical Sessions will be organized into the following tracks:

- <u>Building Information Modeling for Infrastructure (BIM)</u>: The sessions in this track will showcase successful uses of BIM practices and georeferenced data throughout the lifecycle of transportation assets along with future plans for BIM deployment, including digital twins.
- <u>Cross-Cutting Visualization Topics (CC)</u>: It is all connected! These sessions showcase multidisciplinary topics and various visualization techniques for data sharing, planning, programming and analytical tools.
- <u>Performance Measures (PM)</u>: The sessions in this track will showcase innovative approaches to help turn data into actionable insights that drive transportation decisions at all levels. These sessions will highlight multimodal transportation planning, operations, freight, and safety decisions, and the data visualizations that helped support those decisions.
- <u>Participatory Simulation, including virtual and augmented reality (PS)</u>: The sessions in this track include uses of virtual reality and augmented reality to enhance public outreach, design, construction, safety, and worker training.

November 3rd	
7:30 AM – 8:30 AM	**Registration (Great Hall) and Continental Breakfast**
8:30 AM – 10:00 AM	**Opening Session** (Kavli Auditorium) • **Welcome**: Pat Hu, Director, Bureau of Transportation Statistics and Charles Lattimer, CATT Laboratory, University of Maryland—Visualization Conference Planning Committee Co-Chairs • **FHWA Keynote:** Craig Thor, Chief Scientist, Turner-Fairbank Highway Research Center • **Keynote Speaker**: Chiqui Esteban, Graphics Director, The Washington Post
10:00 AM – 10:30 AM	**Break**
10:30 AM – Noon	**Technical Session 1*** • **BIM:** Go Digital! For Enhanced Project Delivery (NAS 120) • **CC:** Planning and Programming Tools (Kavli Auditorium) • **PM:** Visualizing Multimodal Transportation (Lecture Room) • **PS:** Innovative Uses of Virtual Reality (NAS 125)
Noon – 1:30 PM	**Lunch**
1:30 PM –3:00 PM	**Technical Session 2** • **BIM:** Cloning Your Transportation System – The Digital Twin! (Kavli Auditorium) • **CC:** Visuals for Understanding Analytics (Lecture Room) • **PM:** Keep on Truckin'! Freight Visualization (NAS 120) • **PS:** Seeing the Big Picture: Visualizing Transportation Design (NAS 125)
3:00 PM – 3:30 PM	**Break**
3:30 PM – 5:00 PM	**Technical Session 3** • **PM:** Innovative Uses of Visualization in Operations and Planning (Kavli Auditorium) • **CC:** Seeing is Believing – Decision Making Tools (Lecture Room) • **PS:** Bridges to the Future (NAS 120) • **PS:** Virtual Reality for Work Zones (NAS 125)
5:00 PM – 7:00 PM	**Reception, Exhibits, and Interactive Poster Session**

November 4th	
7:30 AM – 8:30 AM	**Registration (Great Hall) and Continental Breakfast**
8:30 AM – 10:00 AM	**Color Theory Workshop** (Kavli Auditorium) • **Keynote:** Thresa-Marie Rhyne
10:00 AM – 10:30 AM	**Break**
10:30 AM – Noon	**Technical Session 4** • **BIM:** Emerging Trends with BIM: From Open Data Standards to Structures to International Initiatives (Kavli Auditorium) • **CC:** Using GIS for Data Sharing (NAS 120) • **PM:** Going with the Flow: Visualization of Transportation Operations (NAS 125) • **Planning:** Engagement and Visualization (Lecture Room)
Noon – 1:00 PM	**Lunch**
1:00 PM – 2:30 PM	**Technical Session 5** • **BIM:** BIM for Maintenance and Lifecycle Asset Management (NAS 120) • **PM:** Perspectives on Transportation Performance Management: (Kavli Auditorium) • **PM:** Safety First! Visualization to Improve Safety Analyses (NAS 125) • **GEO:** Geotechnical Visualization (Lecture Room)
2:30 PM – 3:00 PM	**Break**
3:00 PM – 3:30 PM	**Closing Session** (Kavli Auditorium) • Closing Remarks
4:00 PM – 5:00 PM	**Planning Committee Meeting (invitation only)**

*Note: Session track abbreviations
- CC: Cross-Cutting Topics
- PM: Performance Measures
- BIM: Building Information Modeling for Infrastructure
- PS: Participatory Simulation
- GEO: Geotechnical / Subsurface Visualization