



Joint Simulation Subcommittee

ACP80(1)

2021 SimSub Spring Liaison Meeting

March 5, 2021 | 9:30 – 11:00a CST

Online | Zoom Webinar

1. Background

The Simulation Subcommittee (SimSub) is a joint subcommittee of [ACP20](#), [ACP25](#), [ACP40](#), [ACP50](#), [ACP55](#), [ACP80](#), [AEP40](#), and [AMS10](#). SimSub aims to: *converge and support dialogue between key industry, user-related, and research groups in the traffic simulation field as to foster joint efforts, improve products, and address user needs.*

2. Meeting Objectives

- Define potential activities SimSub can pursue and identify corresponding volunteer groups.
- Learn how other entities collect and address user needs; discuss ways this can be applied to SimSub and the traffic simulation field.
- Learn of the research needs statements (RNS) development process and timeline; discuss ways SimSub can assist with RNS development.

3. Attendance

There were 33 attendees. They are listed in [Appendix A](#) and composed of 37% academics, 30% consultants, 12% state DOT, 9% vendors, 9% federal DOT, and 3% other.

4. Meeting Notes¹

- **Welcome and Introductions**
 - Chris Melson (LTRC) welcomed attendees and initiated meeting.
 - SimSub now has 8 sponsor committees: [ACP20](#), [ACP25](#), [ACP40](#), [ACP50](#), [ACP55](#), [ACP80](#), [AEP40](#), and [AMS10](#). If not already, liaison committees are encouraged to become sponsor committees.
- **Summary of SimSub Annual Meeting**
 - Chris Melson (LTRC) summarized what was discussed at the Annual Meeting (1/5). He presented the updated liaison list (see [Appendix B](#))—and SimSub’s main, overarching goals (see Table 1).
 - Task groups were defined (see Table 1) and correlated to specific goals. Chris solicited volunteers for these task groups. **If interested in serving as a volunteer, please contact Chris (cmelson1@lsu.edu) or John Shaw (jwshaw@iastate.edu) by March 26.**

¹ Meeting notes prepared by Chris Melson.

- The remainder of the meeting comprised of presentations to facilitate how task groups can accomplish their respective goal(s).

Table 1. SimSub Goals and Task Groups.

ID	Goal	Assigned Task Group
G1	Develop, maintain, or otherwise leverage existing, mechanism(s) to collect user needs and related input	User Needs Task Group
G2	Recommend actions and venue to address user needs	
G3	Develop, maintain, host, or otherwise contribute to existing, “living” library of reference material	Resources Task Group
G4	Provide forum for information exchange and foster joint efforts	Liaison/Outreach Task Group
G5	Maintain comprehensive liaison structure	

- **HCM User Feedback Process and Forum**
 - David Stanek (Fehr & Peers) and Bastian Schroeder (Kittelson) presented the process ACP40 uses to collect user feedback on the HCM and how this feedback informs HCM updates. Please see [attached presentation slides](#) (“HCM User Feedback”).
 - The following considerations were noted for ACP80: (a) committee business and public-facing website should be different than TSSM website, (b) mechanism to post TSSM chapters, gather and address comments, is needed, (c) consider login feature to access comment tracking, and (d) assure dedicated resources to maintain website/track comments.
- **NOCoE Resources: Case Studies, Forum, Research Idea Submission**
 - Adam Hopps (NOCoE) summarized available NOCoE resources, including: case studies, user forum, and research idea submission, among others. Please see [attached presentation slides](#) (“NOCoE Resources”) and [NOCoE website](#) for more information.
- **Research Needs Statements (RNS) Process and Timeline**
 - George List (NC State University) presented AASHTO R&I’s RNS development process and timeline. Please see [attached presentation slides](#) (“RNS and SimSub”).
 - George provided ways SimSub can assist with RNS development: (a) act as a forum to elicit research ideas and needs, (b) share those ideas among the greater SimSub community, (c) form network of state DOT staff and enlist their support in formulating, submitting, and sponsoring RNS, and (d) promote the continued value and importance of simulation-based analyses.
- **Ways to Provide Liaison Updates**
 - Due to the high-number of liaisons, it is not feasible for all to provide updates during SimSub meetings. Chris Melson (LTRC) provided two options for providing updates throughout the year: (1) soliciting brief written updates and compiling into a shareable webpage and (2) having presentations at each SimSub meeting, focusing each quarter on a specific, rotating user group (e.g., vendors, TRB committees, and practitioners).
 - It is envisioned the Liaison/Outreach Task Group will determine the appropriate option. In the meantime, the latter option (2) will be pursued.

- **Update on TSSM Review Process**
 - Sanhita Lahiri (VA DOT) summarized the proposed process ACP80 will undergo to review the TSSM. ACP80 may solicit volunteers from SimSub in the review.
- **Wrap Up**
 - Chris adjourned the meeting.

5. Action Items

- Chris Melson/John Shaw to finalize set of liaisons (Apr.).
- Chris Melson/John Shaw to develop initial volunteer groups for the User Needs, Resources, and Liaison Outreach Task Groups (Apr.).
- Task Groups to formulate activities to pursue and present progress at next SimSub meeting (Jun.).
- Chris Melson/John Show to organize next SimSub meeting, anticipated to be jointly held with ITE SimCap Committee (Jun.).
- Please contact Chris (cmelson1@lsu.edu) or John (jwshaw@iastate.edu) with suggestions on activities or any other feedback.

Appendix A: Attendee List

Attendees are listed in alphabetical order by last name.

Table A-1. List of attendees.

Name	Organization	Organization Type
Behzad Bamdad	UC Louvain	Academic
Ghulam Bham	COB	Consultant
Georges Bou-Saab	Arcadis	Consultant
Jordi Casas	Aimsun	Vendor
Tom Creasey	Caliper Corporation	Vendor
Zorica Cvijovic	University of Wyoming	Academic
Gustavo de Andrade	McTrans Center	Academic
Sudheer Dhulipala	WSB	Consultant
Sky Guo	Texas A&M University	Academic
Mohammed Hadi	Florida International University	Academic
Ryan Hale	MO DOT	State government
Vicki Haskell	WI DOT	State government
Adam Hopps	NOCoe	Other
Md Sakoat Hossan	Kittelson and Associates	Consultant
John Hourdos	University of Minnesota	Academic
Michael Hunter	Georgia Institute of Technology	Academic
Sanhita Lahiri	VA DOT	State government
George List	NC State	Academic
Marilo Martin-Gasulla	PTV Group	Vendor
Christopher Melson	LTRC	Academic
Raj Paradkar	Kimley-Horn	Consultant
Mike Reese	NC DOT	State government
Soheil Sajjadi	Arcadis	Consultant
Bastian Schroeder	Kittelson and Associates	Consultant
John Shaw	Iowa State University	Academic
Bob Sheehan	US DOT	Federal government
Maryam Shirinzad	Texas A&M Transportation Institute	Academic
Dave Stanek	Fehr & Peers	Consultant
James Sturrock	FHWA	Federal government
Eric Tripi	GHD	Consultant
Scott Washburn	University of Florida	Academic
Matthäus Zelazny	BAST	Federal government
Lin Zhang	Elite Transportation Group (ETG)	Consultant

Appendix B: List of Liaisons (To Be Updated)

Table B-1 lists potential “industry” liaisons (those from relevant external agencies and professional organizations).

Table B-1. Industry-related liaisons.

Organization	Identified Liaison	Affiliation
AASHTO Committee on Transportation System Operations Committee on Traffic Engineering	Venkat Nallamothe ¹ Neil Boudreau ¹	AASHTO MA DOT
ASCE Connected & Autonomous Vehicles Impacts Committee Street and Highway Operations Committee	Jianming ¹ — ²	TxDOT
FHWA	Jim Sturrock ³ Rachel James ³	FHWA
IEEE Intelligent Transportation Systems Society	Wei-Bin Zhang ¹ Yaobin Chen ¹	UC-Berkeley Purdue
ITE Management and Operations SimCap Committee	Douglas Noble ¹ Eric Tripi	ITE GHD

¹Not yet confirmed; ²Not yet identified; ³Member of ACP80

Table B-2 lists potential “representatives” of broad user communities. “Administrators” comprise of state DOTs that have contributed to TPF-5(176) and TPF-5(458). Data providers include the most utilized providers of traffic-related data. Table B-2 also includes a semi-comprehensive list of vendors of traffic simulation software, open-source simulators, and emerging AV-related simulators.

Table B-2. User-related “representatives”.

Organization	Identified Liaison
Administrators	
CA DOT	Diane Jacobs ^{1,3}
CO DOT	Charles Meyer ¹
FL DOT	Thomas Hill ^{1,3}
LA DOT	Jody Colvin ¹
GA DOT	— ²
MA DOT	Jim Danila ¹
MD DOT	Subrat Mahapatra ¹
MI DOT	Jason Firman ¹
MO DOT	Ray Shank ¹
NC DOT	Jim Dunlop ^{1,3}
NJ DOT	Wasif Mirza ¹
NV DOT	Hoang Hong ¹
NY DOT	Uchenna Madu ¹
OH DOT	— ²
TX DOT	— ²
VA DOT	Sanhita Lahiri ^{1,3}
WA DOT	LisaRene Schiperoort ^{1,3}
WI DOT	Vicki Haskell ^{1,3}
Data Providers	
Streetlight Data	Jim Hubbell ¹
INRIX	— ²
HERE	— ²

Organization	Identified Liaison
WAZE	— ²
TomTom	— ²
AirSage	— ²
Vendors	
Aimsun, Inc.	Jordi Cases ^{1,3}
PTV Vissim	Jochen Lohmiller ^{1,3}
INRO	Michael Mahut ^{1,3}
Caliper Corporation	Daniel Morgan ^{1,3}
McTrans	Behzad Aghdashi ¹
Citilabs	— ²
Metropia	Yi-Chang Chiu ¹
Trafficware	— ²
DTALite	Xuesong Zhou ¹
Sidra	— ²
Paramics	— ²
CARLA	— ²
Apollo	— ²

¹Not yet confirmed; ²Not yet identified; ³Member of ACP80

Table B-3 lists proposed liaison TRB committees and their respective SimSub liaison.

Table B-3. TRB committee liaisons.

Committee	Identified Liaison	Affiliation
A0030C: City Transportation Issues	— ²	
ACS20: Safety Performance Analysis	— ²	
ACP10: Regional TSMO	Bob Sheehan	US DOT
ACP20: Freeway Operations	Lin Zhang	ETG
ACP25: Traffic Signal Systems	Taylor Li Yiheng Feng	UT-Arlington Purdue
ACP30: Vehicle-Highway Automation	Jiaqi Ma	UCLA
ACP35: Managed Lanes	MD Sakoat Hossan	Kittelson
ACP40: Highway Capacity and Quality of Service	Dave Stanek	Fehr and Peers
ACP50: Traffic Flow Theory and Characteristics	Kaan Ozbay Samer Hamdar	NYU GWU
ACP55: Traffic Control Devices	Praveen Edara	U. of Missouri
ACP70: Highway Traffic Monitoring	Mena Lockwood Russel Lewis	VA DOT WI DOT
AEP40: Transportation Network Modeling	Xuesong Zhou	ASU
AKD10: Performance Effect on Geometric Design	Mike Reese	NC DOT
AKR50: Road Weather	— ²	
AMR20: Disaster Response, Emergency Evacuation	Samer Hamdar	GWU
AMS10: Air Quality and Greenhouse Gas Mitigation	Georges Bou Saab Babu Veeregowda Kanok Boriboonsomsin	Arcadis HNTB UC-Riverside
AT015: Freight Planning and Logistics	Sushant Sharma	TTI

²Not yet identified