

User Needs Task Group

2021-07-26 – Second Meeting

The following summarizes the main items discussed:

- Barring no major feedback from the recent Joint SimSub/SimCap Meeting (6/25), the group decided to pursue developing an annual survey. The survey will identify: (1) the primary uses of traffic simulation, (2) analyzed applications, and (3) corresponding user needs.
- John Shaw with assistance from Chris Melson will develop the initial draft of the survey. The group will be able to provide comment on the draft in early September – with the intention to present the survey at the ACP80 Summer Meeting (September 15 – 16).
- The group discussed the need for guidance in determining the appropriate level of calibration effort required, based on what is being evaluated and what decision is to be made.
 - Details of the analysis (tool selection, calibration effort, etc.) will depend on the problem being solved, the solution being investigated, and the operational context.
 - It is unclear if there is specific guidance on this – especially guidance on converting the above methodology into policy.
 - It may be appropriate for this group to pursue defining what types of problems are suited for simulation, and also where simulation is NOT appropriate.
- The group also discussed information to be collected in the survey:
 - What transportation problems simulation is being applied to;
 - What solutions simulation is investigating;
 - The decision process used to determine when to utilize simulation;
 - Related: what stage in the process is simulation being performed;
 - If agencies are using simulation to evaluate emerging technology – and if this has been a motivating factor for adoption;
 - What performance measures are used in simulation;
 - What budgets are being put aside for simulation (they may not be realistic); and
 - Asking about the level of calibration effort.
- The annual survey may not be able to answer all these questions – likely need to be more focused and concise. However, this information may be included in a supplemental survey the group can disseminate when needed.

Action items:

- Develop initial draft of annual survey (8/23) [John with assistance from Chris]
- Disseminate draft to group for comment and meet to discuss (9/2) [Chris]
- Present survey at ACP80 Summer Meeting (9/15) [John/Chris]

2021-06-04 – Initial Meeting

Activities to pursue (as a Task Group):

- Review previously collected user needs and their varied sources (e.g., discussions from the [Workshop on Traffic Simulation and CAV Modeling](#), previous [ITE SimCap](#) surveys, previous SimSub efforts, etc.).
- Develop and disseminate annual survey identifying: (1) the primary uses of traffic simulation, (2) analyzed applications, and (3) corresponding user needs.
 - It was discussed how user needs will vary based on what decision is being made (i.e., will vary if used for project screening, project prioritization, project planning, in-depth operational analysis of alternatives, etc.). User needs will also vary depending on the application being analyzed (e.g., visualizations may be important for showing how traffic will flow through a new, innovative intersection, but may not be important for making decisions based off performance metrics).
 - The annual survey will be able to track how (1), (2), and (3) change over time. It will also identify recurring user needs.
 - The annual survey may require coordination with liaison committees, as user needs related to input data may also arise (e.g., relying on forecast from a planning model).
- Review annual survey and recommend how user needs may be addressed (i.e., through educational efforts, research, etc.). [This wasn't discussed in-depth, but wanted to include]

Action items:

- Task group to present what was discussed at the [upcoming SimSub meeting](#) (6/25) [Mike]
- Schedule next Task Group meeting (within one month after 6/25 meeting) [Shalini]