Optimizing a multi-modal transit hub can accomplish a dual mission: make a journey more enjoyable and bring immense benefits to accessibility and performance. Stops and stations are often where existing and potential riders first interact with a transit service, can provide essential information and more generally frame the level of comfort and satisfaction riders have with transit service. Framing the necessary logistics to create simple, legible, and pleasant experiences at transit hubs grows the capacity and sustainability of the whole system.

A Building Information Model software program supports the ability to coordinate, update, and share design data with team members throughout the design construction and management phases of a building’s life. A key component in managing the BIM process is to establish a foundation for different types of projects by creating standard templates and custom 3D modelled elements. Having this in place makes the process of any new (or renovated) project potentially smoother and with guided efficiency.

This project aims to further previous specialized research into the application of Building Information Modeling (BIM) technology for megaregion mobility, offering recommendations on strategic transportation design and planning methodology for smart infrastructure and multi-modal transit hub design. These objectives will be accomplished through the development of a standard, proprietary BIM architectural template would be further carried out. The base template would allow for the development of advanced custom 3D parametric objects, archive the collection and most likely promote expansion of customized component design by future users.

Multi-Modal Modelling: BIM Templates for Hub Design and Networks (#CM2-19, 40)

Danelle Briscoe, University of Texas at Austin

09/01/2017 - 12/31/2018

Project Information Form: http://sites.utexas.edu/cm2/files/2018/03/Year-1-Danelle-Briscoe-Multi-Modal-Modelling_BIM-Templates.pdf

MULTI-MODAL MODELLING
SUSTAINABLE BIM TEMPLATES

This study was funded by the consortium of Cooperative Mobility for Competitive Megaregions (CM²). CM² is a USDOT Tier-1 University Transportation Center (UTC). CM²’s consortium partners include The University of Texas at Austin, Louisiana State University, Texas Southern University, and the University of Pennsylvania, with affiliates at Cornell University and Rutgers University.