

Workshop/Symposium

Toward a Collaboratively Built and Maintained 3D Model of the Boston Metro Area

Recent innovations in the ability to store three dimensional models in scaleable enterprise and web-delivered databases, along with newly available regional data sources such as photogrammetric and LIDAR roofprint elevation data, raise the possibility of building very large collections of geo-referenced digital models reflecting the shape of the city with full color representations of buildings, streets and plazas at many scales and representing the past and future development scenarios.

Many public agencies, students and private firms invest large amounts of work in the development and use site-specific 3d models, which end up in the recesses of file systems and file drawers around the city. This work could result in a living, ever expanding, multi-purpose representation of the urban region.

This animation created with data from MassGIS, the BRA, and the CA/T Authority.

(by Paul Cote, Harvard Graduate School of Design)

We propose to hold a meeting at the Harvard Graduate School of Design with interested decision makers and data managers from The Boston Redevelopment Authority, the City of Cambridge, Town of Brookline, MassGIS, Harvard University Planning and others to explore the possibility and potential of a shared modeling protocol that would facilitate the mutual sharing of models easily or even to build a unified metropolitan 3D model.

The day will begin with hands-on workshops related to the techniques for using LIDAR data as a starting place for building 3d models; articulation of specific building and site models with texture maps in a 3d modeling package (SketchUp); and procedures for loading detailed three dimensional models into a single, scaleable relational database schema which can be tuned to visualize the entire city at a specific historical epoch, or to portray specific site-specific design scenarios.

Later in the day there will be opportunities for participants to present their own work in the area of 3D GIS (click link below for details) and finally we will have a round-table discussion to explore the next steps in developing model sharing conventions and the possibility of deeper collaboration.

This project is the culmination of a research project of the Boston Redevelopment Authority and the Harvard University Graduate School of Design with indispensable data support from MassGIS.

August 11, 2005 Harvard Graduate School of Design. Please see <http://www.gsd.harvard.edu/pbcote/research/metromodel/symposium> for registration information and updates