

# Downtown & Riverfront Visualization

Developing 3D visualization resources to support ongoing community planning

**Location:** Middlebury, Vermont

**Partners:** Town of Middlebury; The Orton Family Foundation; Middlebury College;  
Community Oriented Geography, LLC; Sensible World + LandWorks.

**Context:** Historic Middlebury, with a downtown that spans both sides of the Otter Creek River, is the shire town of Addison County in western Vermont and home to renowned Middlebury College. During recent years, Middlebury has made extensive use of CommunityViz<sup>®</sup> software to estimate growth potential under a variety of regulatory zoning scenarios and to assess the potential local impacts of possible future large retail “big-box” development. In 2008, final preparations were underway to begin construction on a new *Cross Street Bridge* that would span the river, alleviate the burden on the aging Main Street bridge, and establish a new connection from downtown to the south side of town. Planners and members of the community wanted to know how downtown and areas along the riverfront would be affected by the new bridge.



The Town Planning Office, in partnership with the Orton Family Foundation, decided to create 3D visualization resources for the downtown area that would help residents evaluate current and future planning issues such as the challenges and opportunities presented by the new Cross Street bridge. Initial work was expanded upon with additional funding from outside sources.



*“Interactive 3D scenes offer terrific potential for visualizing future downtown development adjacent to the new bridge, riverfront improvements, future Town Offices, and – the latest concept – a future downtown rail tunnel and Amtrak train station.”*

–Fred Dunnington,  
Middlebury Town Planner

debut these 3D planning support resources and to invite feedback on how they might be used in the future to improve the quality of community planning discussions.

**Technology and Tools:** CommunityViz Scenario 3D 3.3 was used in conjunction with Google SketchUp 7 to create robust and fully interactive 3D scenes. Some additional 3D scene elements were acquired from the freely available Google Earth 3D Warehouse. ArcGIS 9.3 software was used to edit GIS data layers that were used during the process of creating the downtown 3D scenes.

**Outcomes:** The building models, bridge models, and GIS data created for this project will be used to provide 3D visualization support for future town planning initiatives. These resources are compatible with a variety of 3D scene creation tools, including CommunityViz Scenario3D, GoogleEarth, and ESRI ArcScene, which ensures that the initial investment will continue to serve the community in the future as new planning discussions arise.



### KEY LINKS

CommunityViz  
<http://www.communityviz.com>  
 Town of Middlebury  
<http://www.middlebury.govoffice.com>  
 Orton Family Foundation  
<http://www.orton.org>  
 Sensible World + LandWorks  
<http://sensibleworld.net>  
 Community Oriented Geography, LLC  
[Geographer.VT@gmail.com](mailto:Geographer.VT@gmail.com)