

## **Visualize your community in 3D**

A free program for communities  
interested in 3D



**Visualize your community in 3D** is a program being offered to cities and towns to accelerate their transition into the 3D virtual world. The program is being run by Green Mountain GeoGraphics, Ltd. and is made possible by 

The remainder of this document outlines the operation of this program.

## Background

Interest in 3D visualization for the purposes of community planning, economic development, travel tourism and emergency planning is growing dramatically. Translating that interest into action is the challenge. Municipal GIS staffs are already stretched thin to meet current needs and finding the time to learn how to build a 3D GIS is very difficult. After years of working with communities, Green Mountain GeoGraphics understands the challenges faced by GIS managers. We also understand the benefits of 3D GIS and have set out to find ways to help communities begin the transition to a virtual 3D environment. We believe we have uncovered a way to make 3D possible. It involves the use of free software from Google and voluntary participation from the community. The **Visualize your community in 3D** program is made possible by funding from Google.



## The Program

We believe that every community has a core of citizens that seriously care about the future of their city or town and are willing to commit their time and energy to make sure thoughtful decisions are made from the best information possible. From this group, we seek to assemble a Community Modeling Team of 10 – 12 people. We would expect that team members would be municipal employees, students, interns,



architects, developers, members of the business community and interested citizens. Leading this team will be a municipal employee who will ultimately assume ownership of this 3D data layer (i.e. GIS manager). Each team member will participate in a one-day training session in 3D modeling techniques. Each team member will be asked to model 10 assigned buildings. With 100 or

more buildings modeled, a vibrant 3D environment will have been created that can be put to immediate use in both Google Earth and the community's GIS.

Green Mountain GeoGraphics (GMGG) will conduct the one-day training class and continue to provide technical support to the Community Modeling Team members through email and a toll free phone number. As Team members complete building models, they will send their files to GMGG for QA/QC. Once a model is accepted, GMGG will upload the building model to the Google 3D Warehouse where the model can be used in Google Earth. Additionally, GMGG will work with the community's team leader to convert the model to the ESRI multipatch format (This process requires 3D Analyst and SketchUp Pro 6).

## Who are these Community Modelers?



The Community Modeling Team will be composed of people from many different backgrounds and interests. At least one person will be a municipal employee. This person will serve as the team leader and ultimately assume ownership of the 3D building model layer that will be created by the entire team. Filling out the team will be people from many different professions and interests, including, but not limited to members of architectural and development firms, planners, business people, municipal employees and other interested citizens.

Each team member will need to:

1. Provide their own computer equipment and have high speed Internet access. Either Mac or PC computers can be used. Modelers will use the free versions of Google SketchUp and Google Earth that team members can download from the web.
2. Be able to participate in the training session conducted by GMGG
3. Agree to model 10 buildings assigned by the team leader.

Having a digital camera to take pictures of the buildings being modeled would be helpful. Likewise, having a photo editing software program like Photoshop to help prepare photos for use as textures may be important. It is expected that team members with different levels of expertise and equipment availability may be able to help less equipped team members.

Building models created by team members will carry their creator's name so that others can recognize the time and effort contributed to this effort. In addition, once a team member completes their assigned 10 buildings, they will be rewarded with a free license for the Pro version of Google Earth that makes the printing of high resolution images and the creation of video clips possible.

While the total time commitment will vary depending upon individual skill and experience levels, it is anticipated that Community Modeling Team members will end up volunteering approximately 40 hours toward the completion of their ten buildings. If the city/town has good building footprint and height information and can provide suitable digital images of the buildings to be modeled, community volunteers will have an easier time completing their task

## What does the community have to do?



The following is a brief summary of the responsibilities of a community participating in **Visualize *your community* in 3D**.

1. Designate one person, preferably the GIS manager to serve as the Community Modeling Team leader.
2. Recruit the additional Community Modeling Team members.
3. Pick the 100 buildings to be modeled by the team.
4. Allow the modeled buildings to be posted in the 3D Warehouse for public use.
5. Collect building dimensional information, including height
6. Collect digital photos of the buildings to be modeled

Items 5 and 6 will significantly help the Community Modelers complete their assigned buildings and contribute to creation of more accurate building models. Building dimension information is often found in the assessor's records and modelers can use SketchUp to quickly transition building dimensions into accurate footprints. With good orthophotos in Google Earth, dimensions can also be taken directly from the imagery.

## What does Green Mountain GeoGraphics do?



GMGG will run the program for you. We will help you select the buildings to be modeled. We will teach you and the other Community Modeling Team members how to create graphically efficient digital building models. GMGG will review up to 100 models to make sure they meet expectations. We will provide technical support to help keep modelers on track. Our goal is to make this very easy for everyone and to create a useful 3D layer in a very short period of time. Once the building models are completed, everything is given to the city/town to manage and grow as they see fit. There are no strings or hidden requirements.

## Interested? How do I get started?

All you need to do is call or email us to express an interest. We have been given a 3 month trial period and training slots are already starting to fill. If you are interested in moving to 3D, we doubt you will have a better opportunity than the one we have just outlined for you. Our email [info@gis-help.com](mailto:info@gis-help.com) and our phone number is (802) 878-6746. Ask for Gary or Josh. We look forward to working with you.