Atlanta City Editor

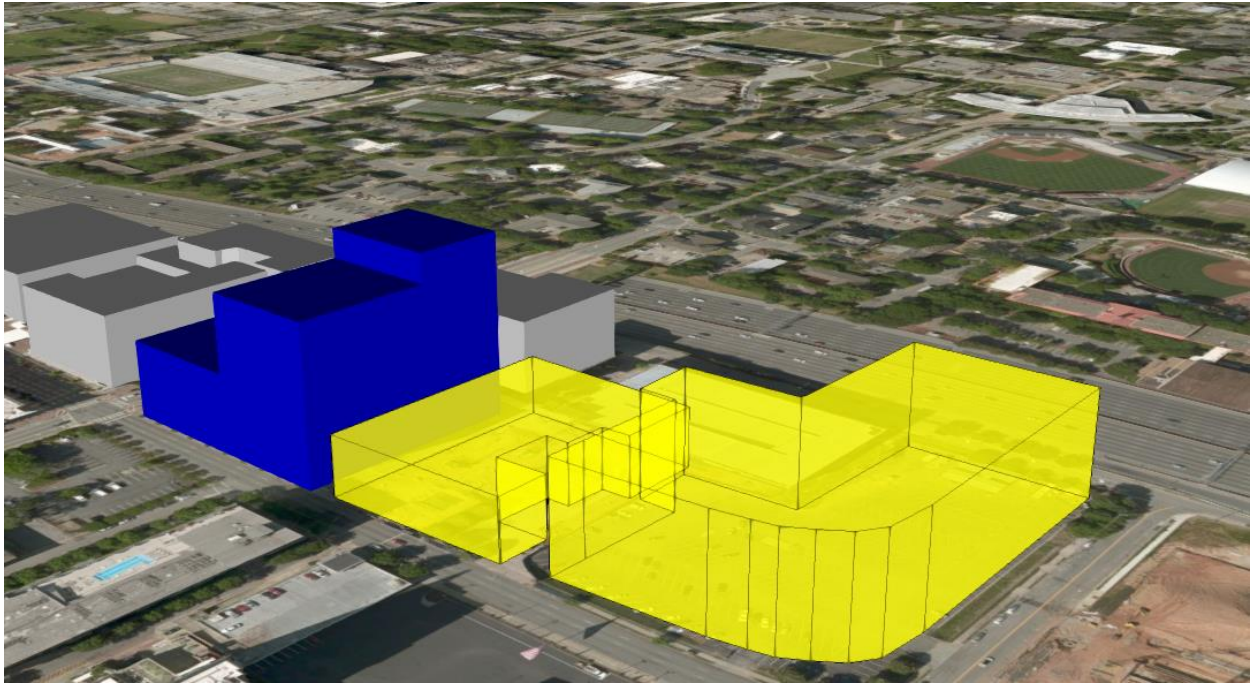## *Application Quick Start Guide*

Figure 1 – Potential Development drawn in with Existing Tech Square Construction

The Atlanta City Editor application is built for analyzing block and building level changes to the built environment. While the Atlanta Interactive Design application is intended to determine the effects of neighborhood and zoning classification level changes to population and employment densities, the Editor application allows for the construction of virtual building of many different sizes and intended uses. By drawing new building footprints and filling out planned usage information, the change to the Atlanta cityscape can be visualized in 3D quickly and easily compared to traditional desktop drafting software. Building envelopes can be laid out either as simple cubes to determine maximum usable volume of a lot or configured more intricately to provide 'what if?' scenarios for new developments.

The City Editor application is accessible from the Atlanta City Design homepage

http://geospatial.gatech.edu/AtlantaCityDesign/

or directly, at the following subdirectory:

http://geospatial.gatech.edu/AtlantaCityDesign/AIDC/

The application's default view is an oblique shot of the area surrounding Tech Square at the intersection of 5th Street and Spring Street.
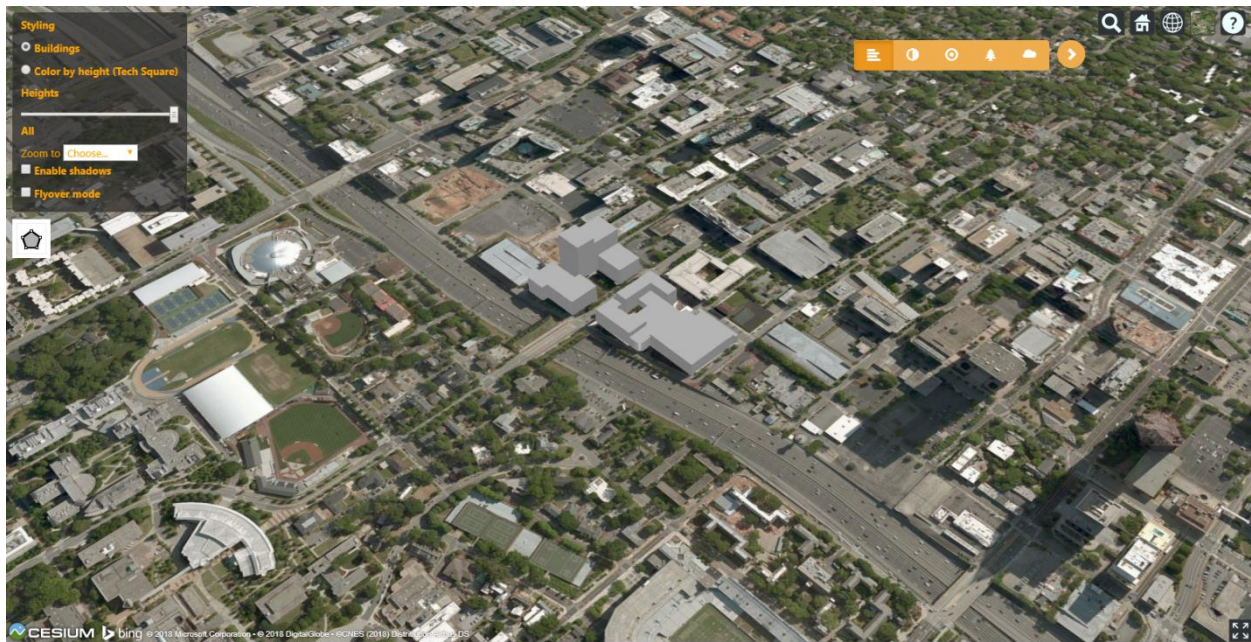

Figure 2 - Atlanta City Editor Home Screen

Navigation in the application is similar to other browser-based mapping applications: click and drag to pan the map, use the scroll wheel to zoom in or out, and wheel-click and drag to tilt the map. In addition, navigation tools are available in the upper right corner:

Search for a location by name or address

Return the application to the Default view

Switch between 2D and 3D versions of the map

Change the background (basemap)

Show the controls for either mouse or touch based navigation

Switch to a 2D Map
Useful for drawing precise building footprints or quickly navigating larger areas without using the search tool
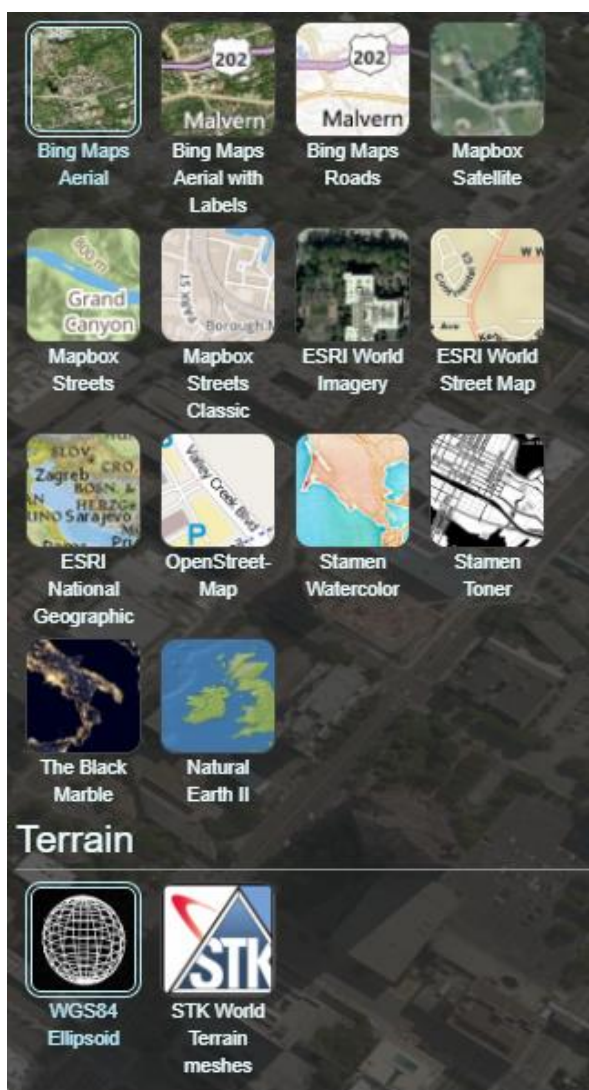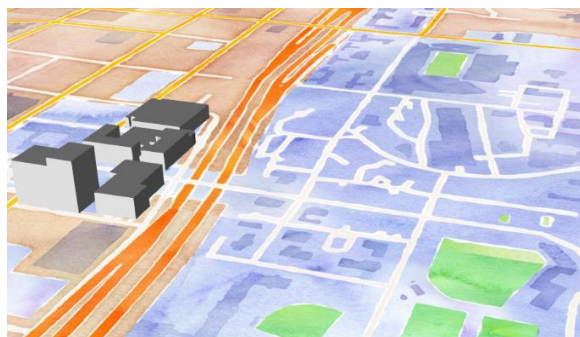
Switch to a 3D Map
Best for viewing structures from various angles and showcasing different perspectives of planned development

Changing the Background Imagery and Basemap

By default, non-labeled aerial imagery serves as the backdrop for the buildings created in the Atlanta City Editor application. This backdrop can be changed to a variety of different stylized maps, maps with features and locations labeled, or other types of realistic satellite and aerial imagery. Access the basemap options from the main navigation toolbar:

Basemaps affect both the 2D and 3D views in the application and allow for the creation of unique and attractive visualizations depending on the intended display purposes.
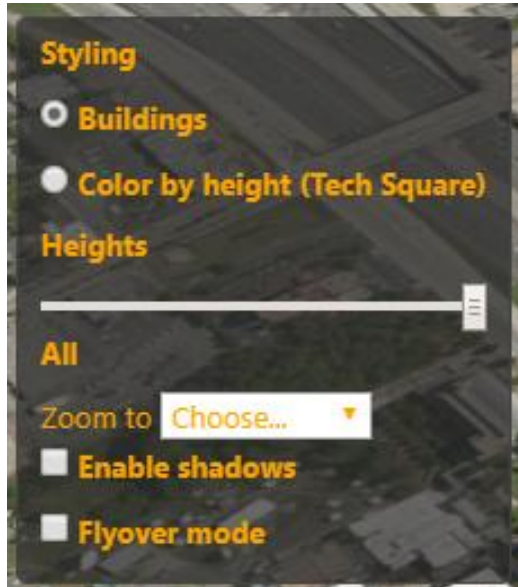
Main Configuration Panel Options

In the top left of the application window are controls to change what and how buildings are displayed on the map. The default grey color scheme can be changed to a height-based symbology for the existing buildings in Tech Square.

The buildings displayed on the map can be filtered by height, to show either only the low-rise structures or to show all buildings.

If working on a distant part of the map, the map can be refocused on Tech Square with the 'Zoom to' option.

If presenting the map and need a hands-off dynamic display, enable 'Flyover mode' to have the application automatically circle the Tech Square Area.

Building Creation and editing Attribute Information

The central tool to the Atlanta City Editor Application allows for the creation of new structures by adding a building footprint to the map. By drawing a 2D polygon and editing the building height and square footage allocation by type of use, development alternatives can be added to the map.

Start creating new structures by clicking this tool and placing the first point on the map. Continue placing vertices until the rough outline of the building footprint is complete, and double click to complete the polygon and finish drawing.

After finishing the building footprint, a default building height is given to the structure to create a 3D shape on the map. Once complete, select the shape again to change or edit the vertices created in the initial sketch. Additional vertices are added between the original points, and between any vertex that is moved – this allows for detailed fine tuning of the building footprint.

To edit the properties of the newly created shape, right click the figure and select show properties. Also available from this menu is the ability to change the appearance of the structure by adding a texture skin (residential or commercial) and the option to remove the building from the map.

Selecting Show Properties brings up the data table that holds details about the selected object on the map. Other rows can be added to this table by selecting other buildings. The attributes that can be edited in the data table are as follows:

- Number of Stories
- Area dedicated to Residential Use
- Number of Residential Units within the Building
- Area dedicated to Nonresidential use

BUILDING ID	PARCEL ID	STORIES	BUILDING TYPE	AREA	RESIDENTIAL UNITS ↓	NONRESIDENTIAL AREA	YEAR BUILT
3	245354	15	Housing	8.965 sqft	87	500 sqft	2002
5	7832	14	Apartments	257 sqft	50	500 sqft	2002
2	78673	15	Hotel	2.350 sqft	15	500 sqft	2002
1	5325145	9	Office	4.000 sqft	5	500 sqft	2002

Displaying Map Data via Charts and Graphs

To view a summary of the information on buildings in Tech Square, a series of graphs are available to display the tabular data in an easy to read format. These charts can all be printed or downloaded in a variety of image formats. Charts and Graphs are accessible from the Charts Menu bar.