

# *Would you like to know more?*

Please get in touch with us. We'd love to hear your thoughts on what you've seen & heard today. Has the content been insightful? Relevant? How will you do things differently as a result of this seminar?

**If you have any questions or feedback, please drop us an email:**

Phil Rhodes: [Phil.Rhodes@surveyors.org.nz](mailto:Phil.Rhodes@surveyors.org.nz)

Sam Coles: [S.Coles@harrisingrierson.com](mailto:S.Coles@harrisingrierson.com)

Colin O'Byrne: [Colin.OByrne@otago.ac.nz](mailto:Colin.OByrne@otago.ac.nz)

The NZIS Masterclass series is a learning experience for all involved and we try to bring you something new each time. We have enjoyed sharing our thoughts with you, the professionals in our industry, and we appreciate the opportunity. Thanks for attending!

## **Sketchup Resources:**

Sketchup Make 2013 is the free edition available from Trimble's website: [Trimble.com](http://Trimble.com)

Sketchup Pro can be purchased from Professional Cad Systems (based in Hamilton) or purchased directly from Trimble.

Out of the box, sketchup is fairly basic, so make sure you check out some of the plugins. They can be found in Sketchup's built-in extension browser. A more detailed list of professional-quality plugins are available at: The first stop should be [Sketchucation.com](http://Sketchucation.com). This comprehensive site contains excellent plugins, news articles, lots of tutorials and other content to explore.

For more plugins and resources visit the Ruby depot <http://rhin.crai.archi.fr/rld/>

## **Some of the new tech mentioned in Sam's Presentation:**

**Aero3D and Euclidean Technology** - Promotional video showing the latest photogrammetry and point cloud tech:

<https://www.youtube.com/watch?v=ABdlwKpBLQw>

"aero3Dpro-Your world in true 3D"

Example of a rich visual gis/spatial model: Melbourne CBD as seen viewed in Aero 3d (point clouds, photogrammetry with GIS and BIM data behind it).

<http://www.youtube.com/watch?v=qObATYOSwIM>

"New-Gen Virtual 3D city model: Melbourne CBD - aero3Dpro"

**Terraexplorer Plus** is a Similar technology to Aero3D but a little simpler and more accessible - the AIBOT X6 rotor used to capture this data costs around \$25,000. This is a video showing it's application to mining:

[http://www.youtube.com/watch?v=5\\_kFyxuLLPw#t=155](http://www.youtube.com/watch?v=5_kFyxuLLPw#t=155)

**StreetCam 3D** is Terralink's "google streetview on steroids" with amazingly detailed laser-scanned environments.

<http://vimeo.com/48279331>

**Leica TruView** is a viewer and markup tool that makes laser-scanned data easy to view and access. This has a wide variety of applications.

[http://hds.leica-geosystems.com/en/Leica-TruView\\_63960.htm](http://hds.leica-geosystems.com/en/Leica-TruView_63960.htm)

**Photosynth** - An excellent and useful piece of software that will stitch together your photos and create a 3d model (not unlike Streetview). This one shows an archeological site:

<http://photosynth.net/view.aspx?cid=a24699b0-e68c-4b87-b414-9ba074480352>

**Google Earth 2013 and Apple Maps.** LIDAR and detailed photogrammetry are now commonplace in main centres and coverage is increasing steadily. Google Earth can import 3D files, contours and site plans.

Do check out Google Earth and zoom to Boston, USA as an example of a detailed 3D city. If you have a Pro version of Google Earth, take a look at the GIS layers. If you do have iOS7, check out Auckland or other cities in NZ on Apple Maps.

**Modelling, BIM, GIS Hybrids** - This is the ultimate - a "concept video" showing a fusion of GIS, BIM, 3D visualisation (provided in this case by computer game technology).

How might a city utilise this resource to manage its assets, plan for growth, monitor crime and pollution?

How could this highly accessible system enable the community to engage with the planning process and give input to a range of issues?

[http://www.youtube.com/watch?v=hLp5eEso\\_L0&feature=plcp](http://www.youtube.com/watch?v=hLp5eEso_L0&feature=plcp)

"[Full HD] SimCity 5 CryEngine/Glass Box 2013"

**3D Printing applied to house:** This video is a house being "3d printed." It's a talk from TedX which is about 20mins long, but skip about half way through if you just want to see the house being printed.

<http://www.youtube.com/watch?v=ehnzfGP6sq4>

"3D printer can build a house in 20 hours"

**Prefabrication Technology:** Timelapse video of a 30-storey hotel building being constructed in just 15 days from prefabricated parts:

<http://www.youtube.com/watch?v=rwvmru5JmXk>

"30-Story Building Built In 15 Days (Time Lapse)"

**Entertainment meets GIS: creating our city planners of the future?**

This video is of Sim City 5, which was created with input from planning, traffic engineering, urban design, economics and GIS professionals. The complexity of this virtual world is astonishing; zoning rules, traffic, pollution, health, the economy - all linked together as one system.

<http://www.youtube.com/watch?v=ZolMAvjdl4o>

"SimCity 5 / 2013 Gameplay HD"

