

Smart Planning for Smart Cities - Techniques for Managing the Revolution in Urban Planning

E. Stephen GOLDIE RFD, BTP, MPIA

Abu Dhabi Department of Municipal Affairs, United Arab Emirates

UN population forecasts translate into a need to build three complete new cities the size of Brisbane every month for the next thirty-five years. Mostly in the massive arc stretching from northern Africa through the Middle East, and across all of Asia to Oceania. The alternative is the anarchy that we see in Syria today, except that it will be global.

Current planning systems struggle to produce quality plans for new urban areas at anything like that rate. Notwithstanding geographic information systems, on-line lodgement and word processing, plan making techniques and approvals processes have barely changed over the last hundred years.

But this is all about to change! The planning profession faces the twin disruptors of population pressures and technological innovation.

To house an additional 3 billion people in cities by 2050, administrations seeking to manage urban development and population growth in a resource efficient and environmentally sensitive manner will increasingly turn to recent innovations that are already being deployed piecemeal around the world, e.g.:

- Daily satellite imagery;
- Drones;
- Big data, powerful algorithms and deep learning;
- Automated plan making; and
- Automated applications approvals software.

These and other technologies, if properly integrated, promise plans for new cities in months and planning permits in an instant, revolutionising the relationship between the national or provincial legal framework and more local integrated planning, but at the cost of many existing safeguards. Combined, they will create a revolution in urban planning, but will the outcome be “smart” or will it be “garbage in, garbage out”?