



A planet of smarter cities.

In 1900, only 13% of the world's population lived in cities. By 2050, that number will have risen to 70%. We are adding the equivalent of seven New Yorks to the planet every year.

This unprecedented urbanisation is both a sign of our economic and societal progress and a strain on the planet's infrastructure. It's a challenge felt by mayors, heads of economic development, our schools, police chiefs and other leaders who each help to build and support the communities in which we live.

The challenges these leaders face – educating the young, keeping citizens safe and healthy, attracting and facilitating commerce, and enabling the smooth flow of planes, trains, cars and pedestrians – are compounded by the global economic downturn.

Thankfully, help is at hand. Around the world, intelligence is being infused into the way our cities work.

Transport officials in London, Brisbane and Stockholm are using smart systems to reduce both congestion and pollution. Public safety officials in major cities like New York are able not only to solve crimes and respond to emergencies, but to help prevent them. A large hospital organisation in Paris is implementing an integrated patient-care management solution to facilitate seamless communication across its business applications – enabling them to track every stage of a patient's stay in the hospital.

Italy, Malta and Texas are applying smart meters and instrumentation to make the power grids in their cities more stable, efficient and ready to integrate renewable energy sources and electric vehicles. A large US city built a transparent management system that helps identify and restructure low-performing schools and increase academic achievement for students. Smart water management in the Paraguay-Paraná River Basin of Brazil is helping to improve water quality for São Paulo's 17 million residents.

Closer to home, IBM is involved in a collaborative research initiative with the Marine Institute in Ireland, which aims to turn Galway Bay into a living laboratory – instrumenting the bay to gather data on water temperature, currents, wave strength, salinity and marine life, and applying algorithms that can forecast everything from wave patterns over 24 hours to the right time to harvest mussels.

These solutions, and many more, are making a real impact today. But they are just the first step toward a true smart city.

For a glimpse of what that might look like, consider Masdar City, which is being built from scratch near Abu Dhabi, in the United Arab Emirates. Planners there are working with top scientists, engineers and innovators to create interconnected systems and manage them through an integrated city dashboard.

Masdar City's leaders want to be able to fine-tune their metropolis in realtime – and thus shape what could be the world's first economically and environmentally sustainable city, with zero carbon emissions, as they go.

The lessons they learn – both technological and in terms of city-wide collaborative management – can be spread around the globe.

If someone could have observed the Earth from space two centuries ago, he or she would have seen the light from just two concentrations of a million or more people – London and Beijing. Today, there are 450 such shining cities – and they are the economic, governmental, cultural and technological power plants of a global urban age. Our future depends on keeping them running and growing brightly.

Let's build a smarter planet. Join us and see what others are thinking.

